

**GOLDEN VALLEY RANCH**

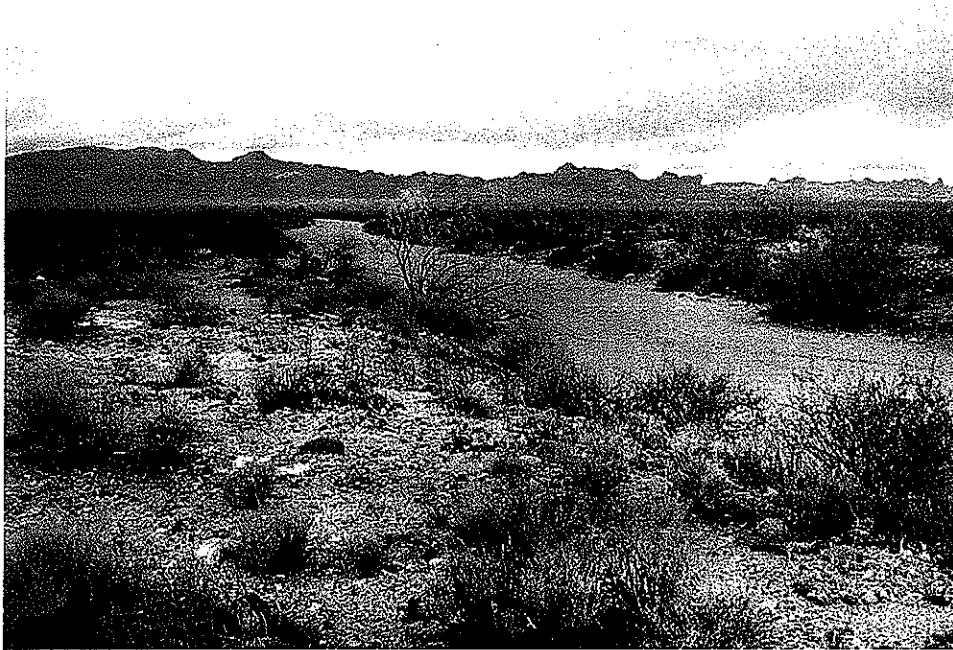


Figure 15 - W - Centennial at Holy Moses Wash center braid



Figure 16 - S - Yucca north of Hualapai alignment

**GOLDEN VALLEY RANCH**

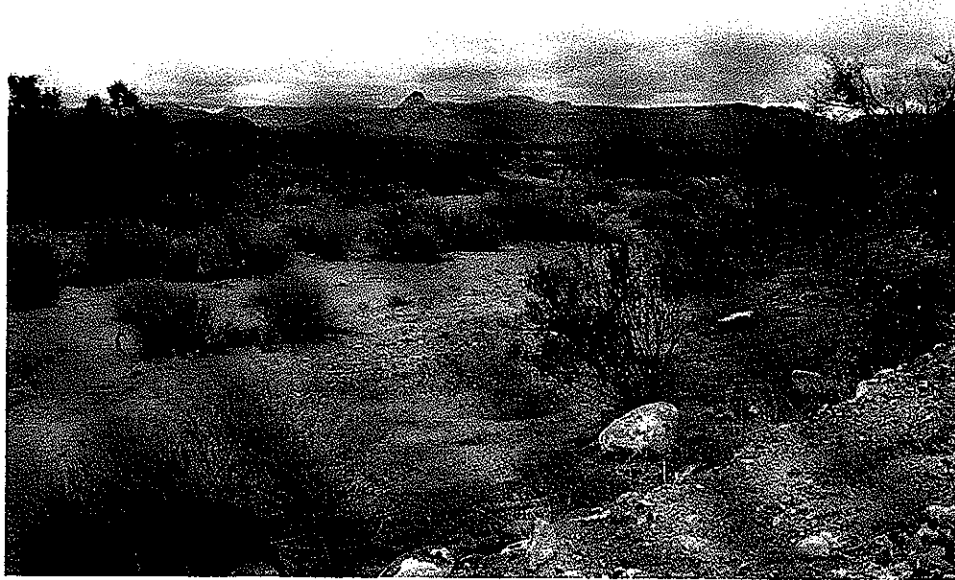


Figure 17 - E - Yucca at Holy Moses Wash



Figure 18 - Acquarius at Tampico - unnamed wash

**GOLDEN VALLEY RANCH**



Figure 19 - Aztec - north: near Bolsa

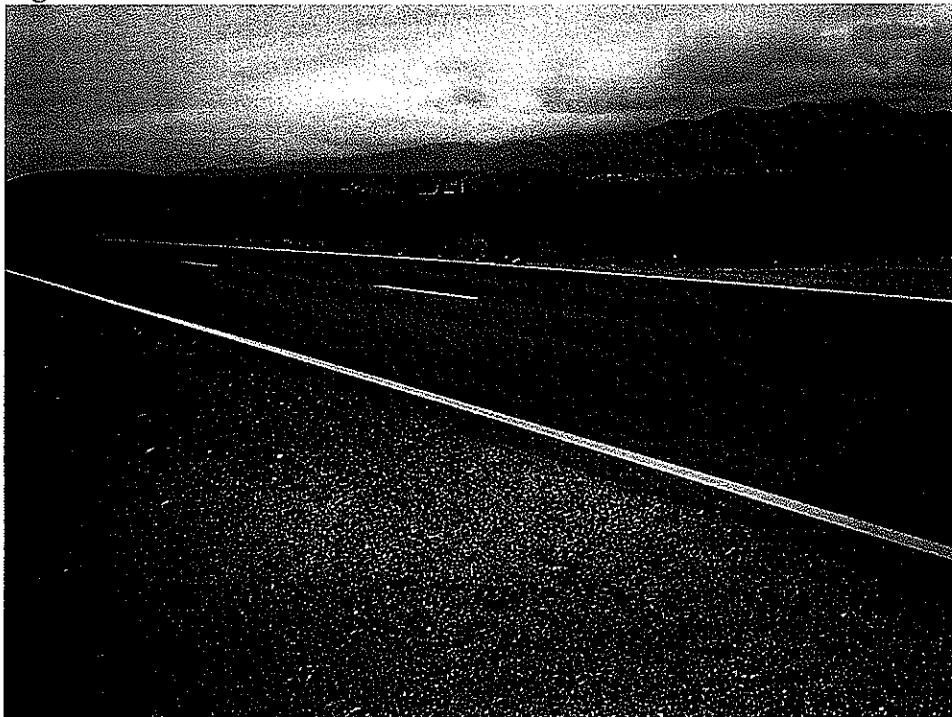


Figure 20 - Aztec - NE near Bolsa



**GOLDEN VALLEY RANCH**

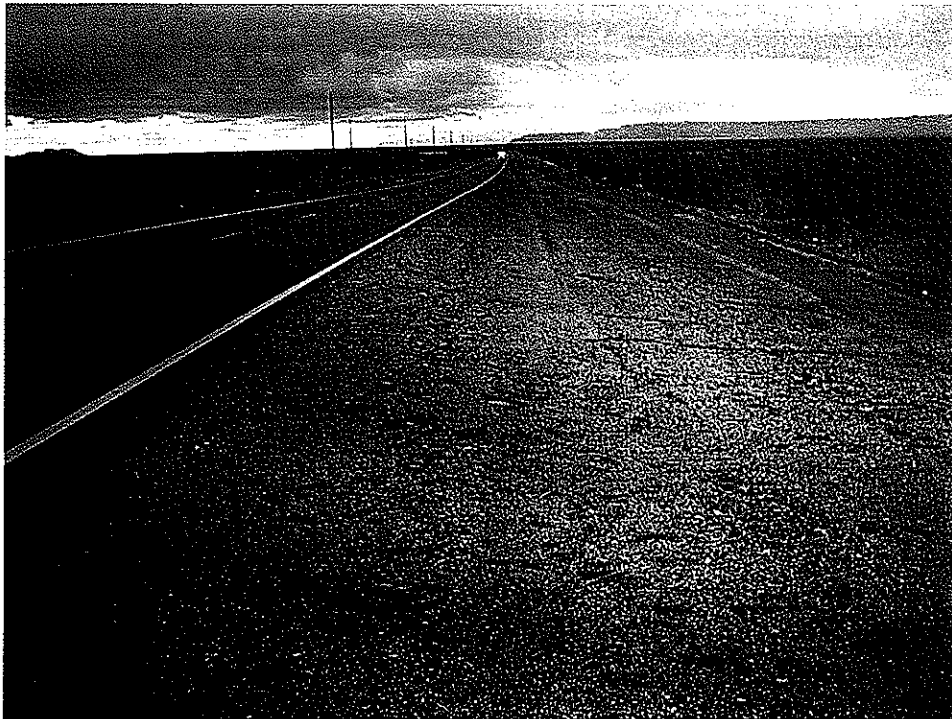


Figure 21 - Aztec - S - near Bolsa: note "Ocean Front Ranch"



Figure 22 - Aztec at north braid of Holy Moses Wash – West

**GOLDEN VALLEY RANCH**



Figure 23 - Shinarump at Sacramento Wash (east braid)



Figure 24 - Shinarump at Sacramento Wash (east braid - north)

GOLDEN VALLEY RANCH



Figure 25 - N - Shinarump at Maverick



Figure 26 - S - Shinarump at Maverick



**GOLDEN VALLEY RANCH**



Figure 27 - N - Shinarump at Adobe



Figure 28 - S - Shinarump at Adobe

**GOLDEN VALLEY RANCH**



Figure 29 - S - Shinarump at Sacramento

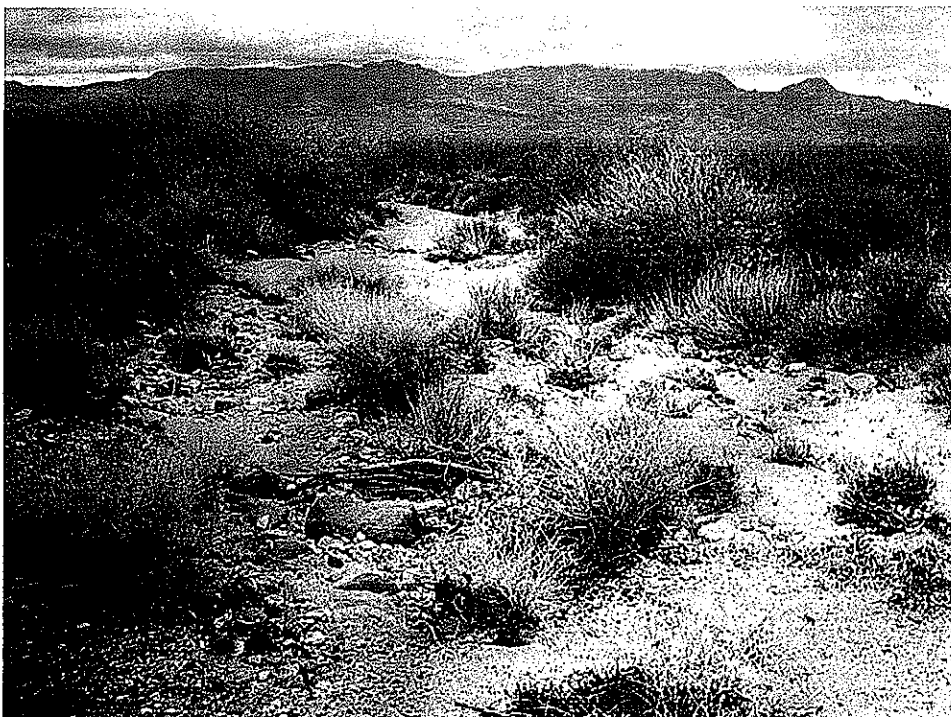


Figure 30 - Sacramento at Holy Moses center braid



**GOLDEN VALLEY RANCH**

## **APPENDIX B**

### **HYDROLOGY – REGIONAL ANALYSIS**

HEC-HMS Regional Analysis -- Results Junctions A - Q

Green-Ampt Shed Parameters

Green-Ampt Soil Association – XKSAT

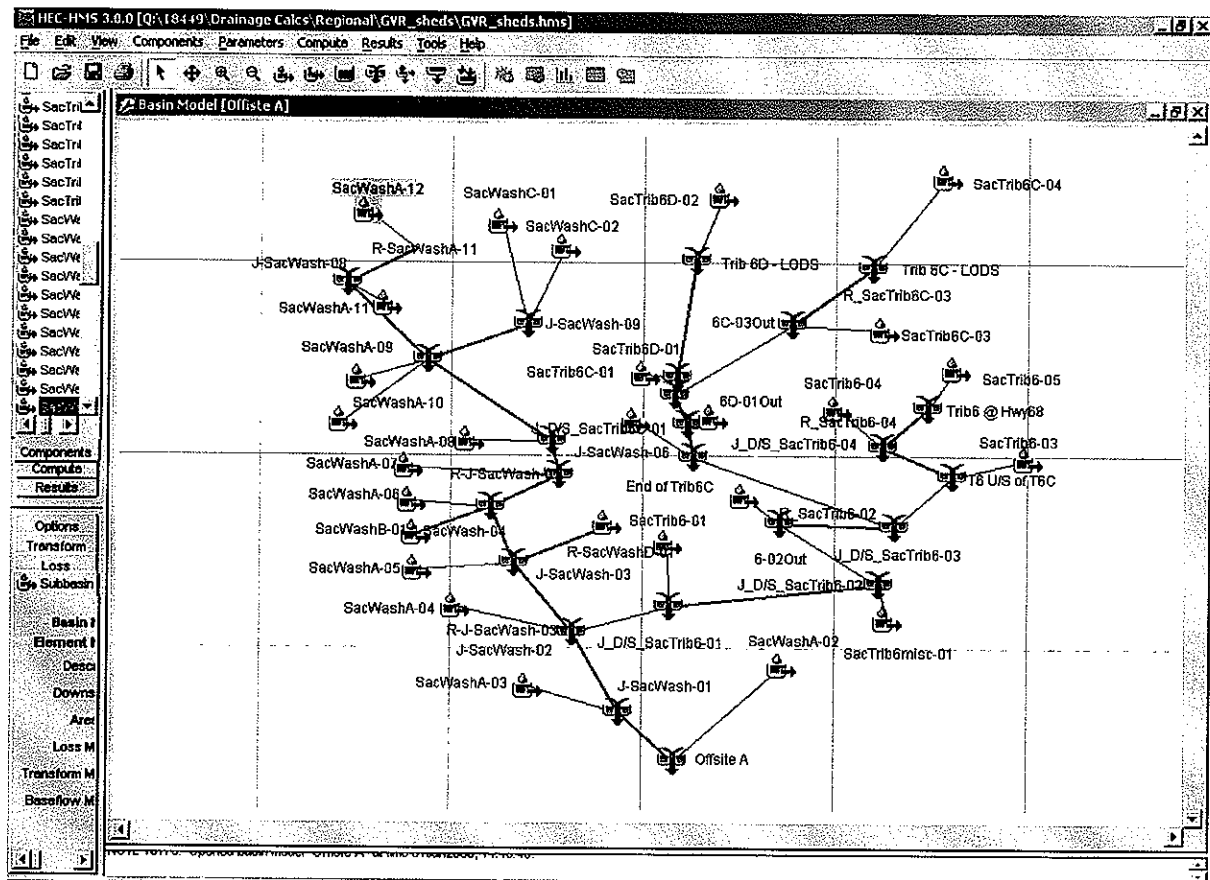
ADOT – Composit Values of PSIF & Dtheta

Precipitation Distributions

Time of Concentration Worksheet

Muskingum Routing Worksheet

# Golden Valley Ranch Technical Drainage Study



# Golden Valley Ranch Technical Drainage Study

Project: Offsite A 100yr-24hr

Description: Basin: Offsite A &amp; Met: Offsite A 100yr-24hr &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
6-02Out	21.8989	2891.23	01Jan3000, 16:55	1221.57
6C-03Out	0.4592	232.91	01Jan3000, 13:45	32.28
6D-01Out	0.7264	281.14	01Jan3000, 14:10	56.5
End of Trib6C	1.6596	599.27	01Jan3000, 14:50	123.29
J-SacWash-01	129.1579	14408.78	01Jan3000, 18:25	7494.35
J-SacWash-02	128.7353	14471.55	01Jan3000, 18:00	7510.45
J-SacWash-03	104.0491	12514.4	01Jan3000, 17:10	6204.22
J-SacWash-04	86.6442	10742.89	01Jan3000, 16:45	5218.46
J-SacWash-05	80.2562	10214.44	01Jan3000, 16:50	4849.36
J-SacWash-06	70.4152	9328.6	01Jan3000, 16:45	4248.44
J-SacWash-07	65.2222	8726.4	01Jan3000, 16:10	3888.13
J-SacWash-08	32.1654	5645.11	01Jan3000, 15:40	2076.54
J-SacWash-09	20.0291	2756.46	01Jan3000, 15:45	1051.81
J_D/S_SacTrib6-01	22.561	2950.55	01Jan3000, 16:55	1269.9
J_D/S_SacTrib6-02	22.5341	2951.55	01Jan3000, 16:50	1270.03
J_D/S_SacTrib6-03	21.8473	2892.44	01Jan3000, 16:50	1220.06
J_D/S_SacTrib6-04	19.9542	2717.28	01Jan3000, 16:35	1087.23
J_D/S_SacTrib6C-01	1.3683	533.6	01Jan3000, 14:25	102.81
J_D/S_SacTrib6C-02	1.1856	488.47	01Jan3000, 14:00	88.78
Offsite A	133.9649	13977.16	01Jan3000, 20:25	7401.64
R-J-SacWash-01	129.1579	13960.81	01Jan3000, 20:25	7116.5
R-J-SacWash-02	128.7353	14405.37	01Jan3000, 18:25	7469.64
R-J-SacWash-03	104.0491	12257.85	01Jan3000, 18:30	6101.62
R-J-SacWash-04	86.6442	10651.35	01Jan3000, 17:30	5183.79
R-J-SacWash-05	80.2562	10154.5	01Jan3000, 17:05	4838.66
R-J-SacWash-06	70.4152	9264.99	01Jan3000, 17:05	4236.63
R-J-SacWash-07	65.2222	8668.12	01Jan3000, 16:50	3869.92
R-J-SacWash-08	32.1654	5558.79	01Jan3000, 16:00	2074.5
R-J-SacWash-09	20.0291	2500.74	01Jan3000, 17:55	1026.7
R-SacWashA-11	18.2356	2995.6	01Jan3000, 17:05	1061.19
R-SacWashB-01	5.3076	1749.36	01Jan3000, 15:25	314.36
R-SacWashD-01	14.1515	1796.18	01Jan3000, 16:40	791.4
R_SacTrib6-01	22.5341	2950.55	01Jan3000, 16:55	1268.63
R_SacTrib6-02	21.8473	2891.23	01Jan3000, 16:55	1219.02
R_SacTrib6-03	19.9542	2715.16	01Jan3000, 16:55	1084.14
R_SacTrib6-04	19.5342	2703.39	01Jan3000, 16:35	1065.09
R_SacTrib6C-01	1.3683	532.16	01Jan3000, 14:50	102.87
R_SacTrib6C-02	1.1856	486.74	01Jan3000, 14:30	88.87
R_SacTrib6C-03	0.2518	119.2	01Jan3000, 14:00	17.74
R_SacTrib6D-01	0.4351	170.95	01Jan3000, 14:15	33.85
SacTrib6-01	0.0269	16.87	01Jan3000, 13:20	1.27
SacTrib6-02	0.0516	41.92	01Jan3000, 13:20	2.55
SacTrib6-03	0.2335	87.51	01Jan3000, 13:50	12.63
SacTrib6-04	0.42	155.84	01Jan3000, 13:55	22.14
SacTrib6-05	19.5342	2703.87	01Jan3000, 16:20	1068
SacTrib6C-01	0.2913	136.08	01Jan3000, 13:50	20.43
SacTrib6C-02	0.1827	139.36	01Jan3000, 13:35	13.94
SacTrib6C-03	0.2074	145.45	01Jan3000, 13:35	14.54



**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
SacTrib6C-04	0.2518	120.05	01Jan3000, 13:50	17.73
SacTrib6D-01	0.2913	116.27	01Jan3000, 14:00	22.65
SacTrib6D-02	0.4351	171.61	01Jan3000, 14:05	33.83
SacTrib6misc-01	0.6352	206.34	01Jan3000, 14:20	48.46
SacWashA-02	4.807	1327.99	01Jan3000, 14:50	285.14
SacWashA-03	0.4226	163.44	01Jan3000, 14:00	24.71
SacWashA-04	2.1252	664.09	01Jan3000, 14:35	138.93
SacWashA-05	3.2534	1031.98	01Jan3000, 14:45	229.03
SacWashA-06	1.0804	381.03	01Jan3000, 14:15	65.44
SacWashA-07	9.841	2391.58	01Jan3000, 15:15	612.73
SacWashA-08	5.193	1322.07	01Jan3000, 15:10	378.52
SacWashA-09	10.2545	1848.39	01Jan3000, 15:40	622.68
SacWashA-10	2.7732	764.85	01Jan3000, 14:40	164.25
SacWashA-11	13.9298	4034.8	01Jan3000, 15:15	1015.36
SacWashA-12	18.2356	3102.49	01Jan3000, 15:55	1065.73
SacWashB-01	5.3076	2078.47	01Jan3000, 14:15	314.36
SacWashC-01	10.3994	1367.37	01Jan3000, 16:00	556.79
SacWashC-02	9.6297	1416.54	01Jan3000, 15:35	495.01
SacWashD-01	14.1515	1809.07	01Jan3000, 16:25	794.83
T6 U/S of T6C	20.1877	2721.56	01Jan3000, 16:55	1096.76
Trib 6C - LODS	0.2518	120.05	01Jan3000, 13:50	17.73
Trib 6D - LODS	0.4351	171.61	01Jan3000, 14:05	33.83
Trib6 @ Hwy68	19.5342	2703.87	01Jan3000, 16:20	1068

### Golden Valley Ranch Technical Drainage Study

Project: Offsite B 100yr-6hr  
Description: Basin: Offsite B & Met: Offsite B 100yr-6hr & Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13MileWashE-01	1.0617	387.04	01Jan3000, 06:25	83.43

Project: Offsite F 100yr-6hr  
Description: Basin: Offsite F & Met: Offsite F 100yr-6hr & Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13MileWashCmisc-01	13.8253	5723.24	01Jan3000, 05:50	619.81

Project: Offsite G 100yr-6hr  
Description: Basin: Offsite G & Met: Offsite G 100yr-6hr & Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13MileWashE-03	0.357	227.31	01Jan3000, 05:40	22.28

Project: Offsite J 100yr-6hr  
Description: Basin: Offsite J & Met: Offsite J 100yr-6hr & Control: Control 1

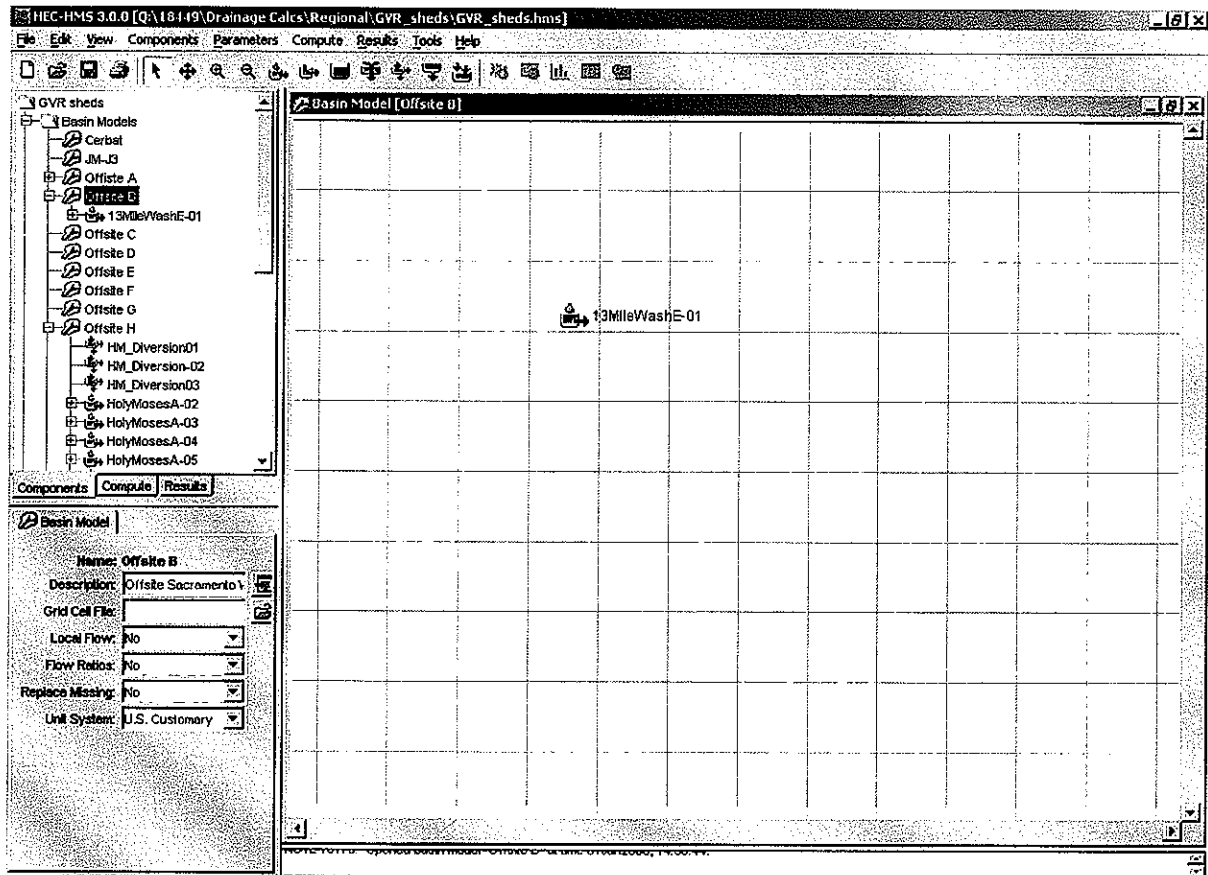
Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
SacWashE-01	2.0957	1123.25	01Jan3000, 06:10	157.7

Project: Offsite K 100yr-6hr  
Description: Basin: Offsite K & Met: Offsite K 100yr-6hr & Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
Offsite Diverted -01	0.1161	143.01	01Jan3000, 05:20	8.55

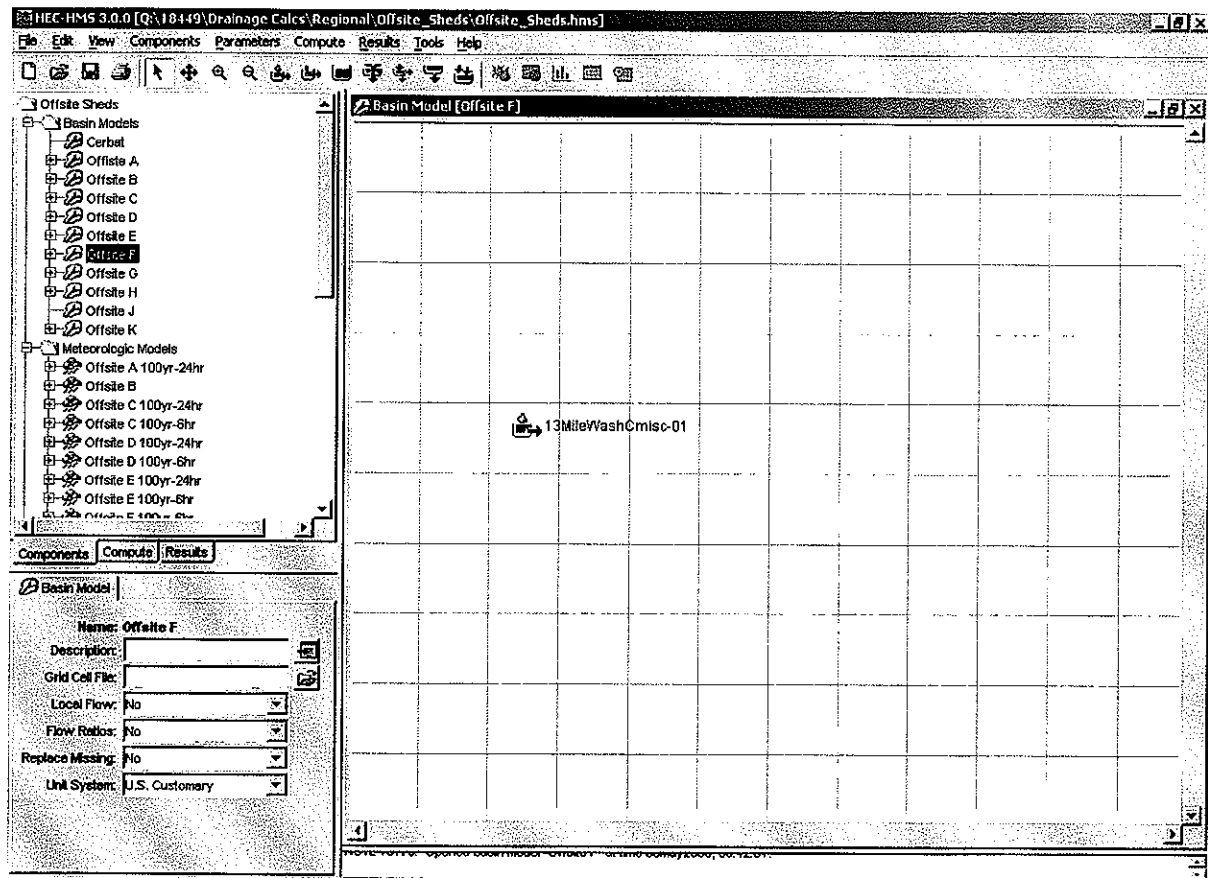
Project: Offsite L 100yr-6hr  
Description: Basin: Offsite L & Met: Offsite L 100yr-6hr & Control: Control 1

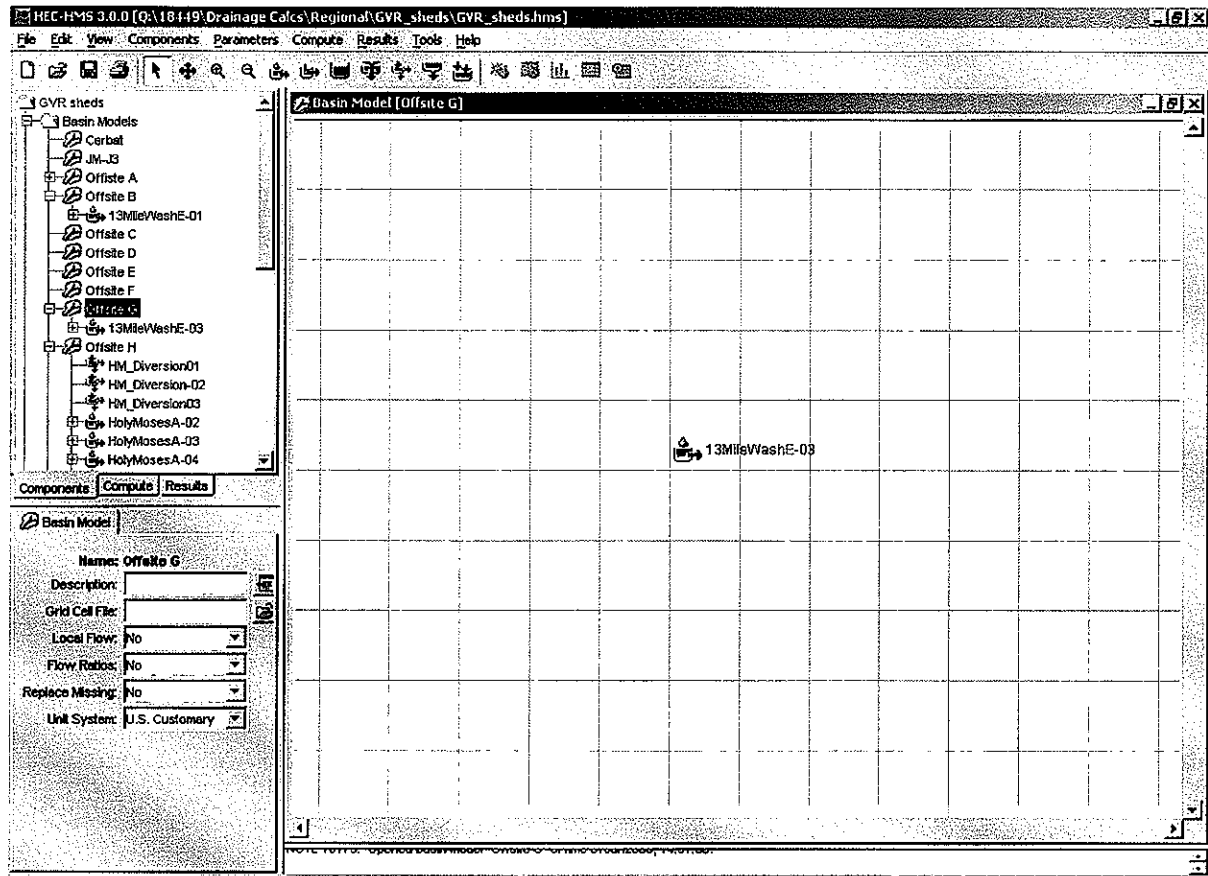
Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
Offsite Diverted-02	1.1335	728.27	01Jan3000, 05:50	73.99

Golden Valley Ranch  
Technical Drainage Study

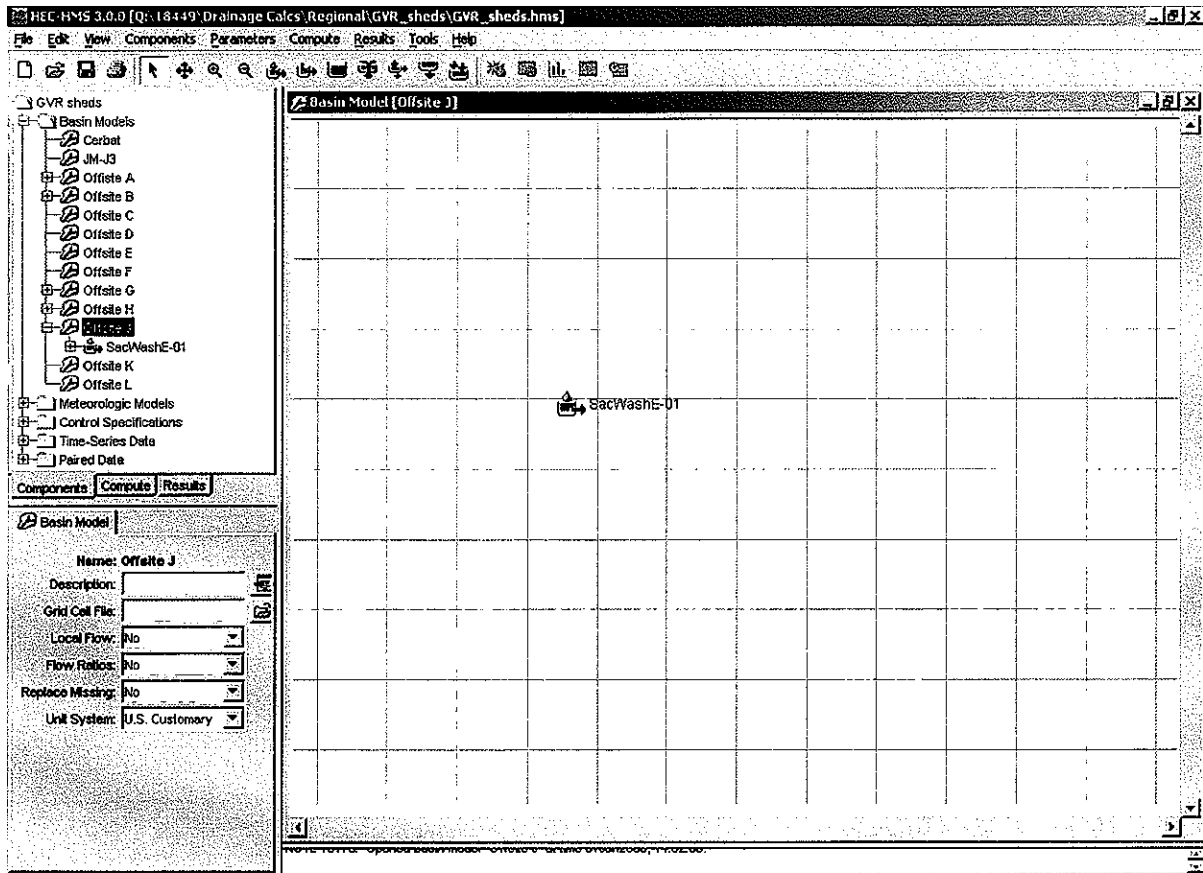


# Golden Valley Ranch Technical Drainage Study

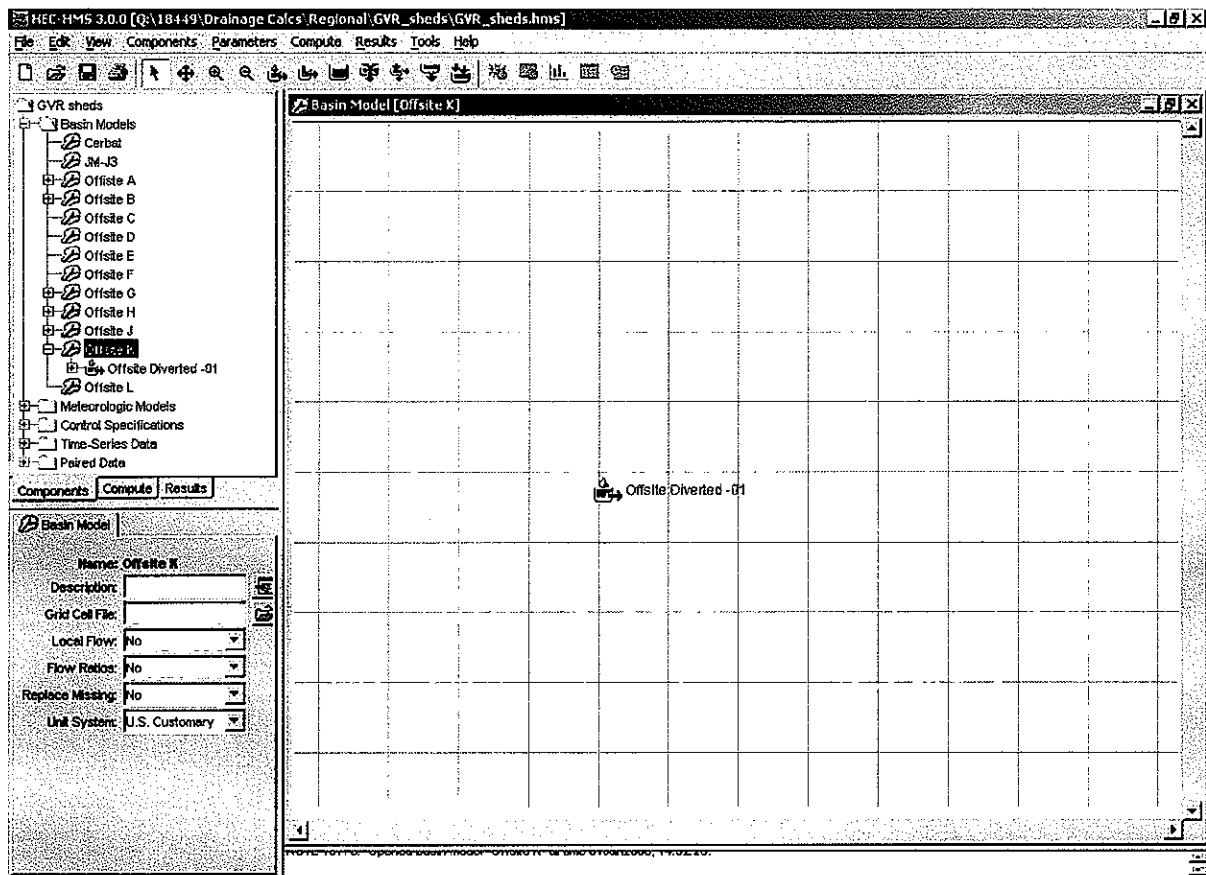


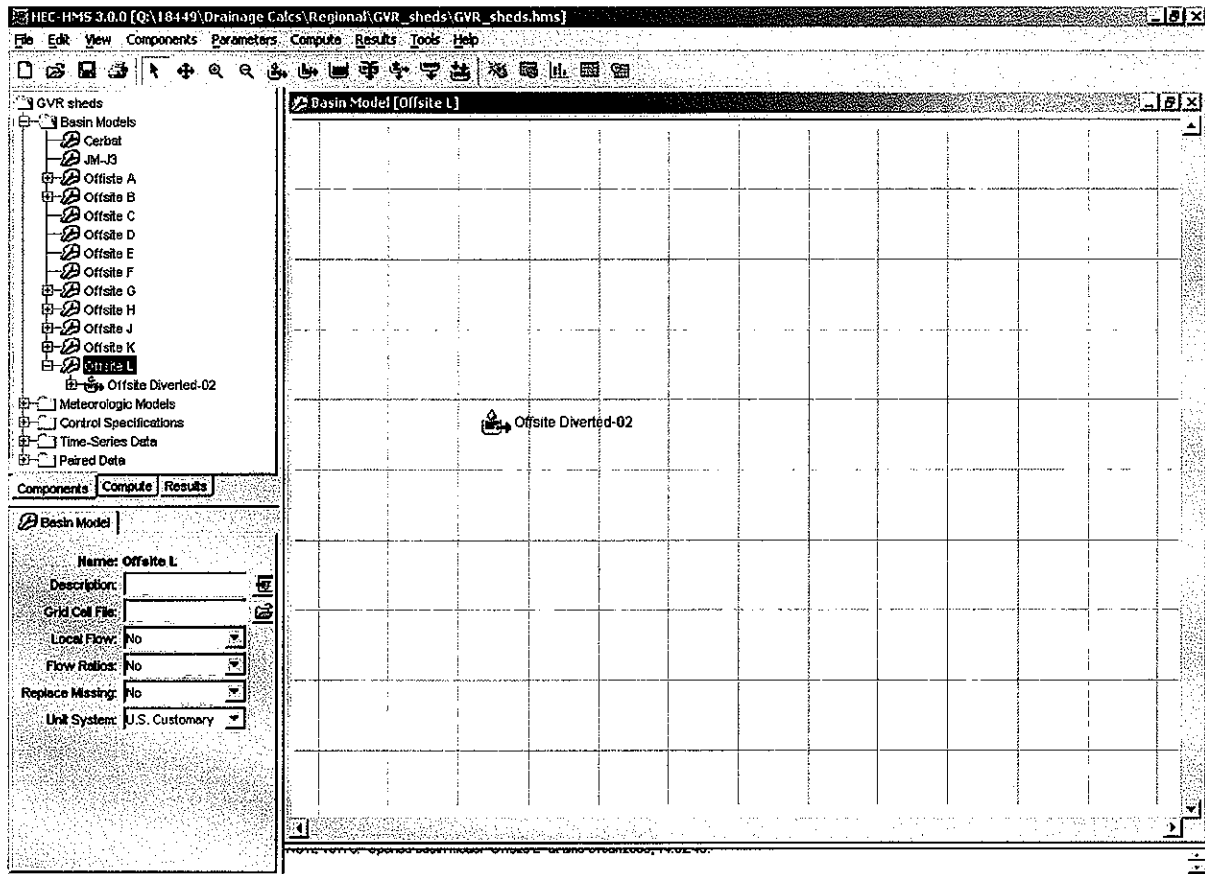
Golden Valley Ranch  
Technical Drainage Study

# Golden Valley Ranch Technical Drainage Study

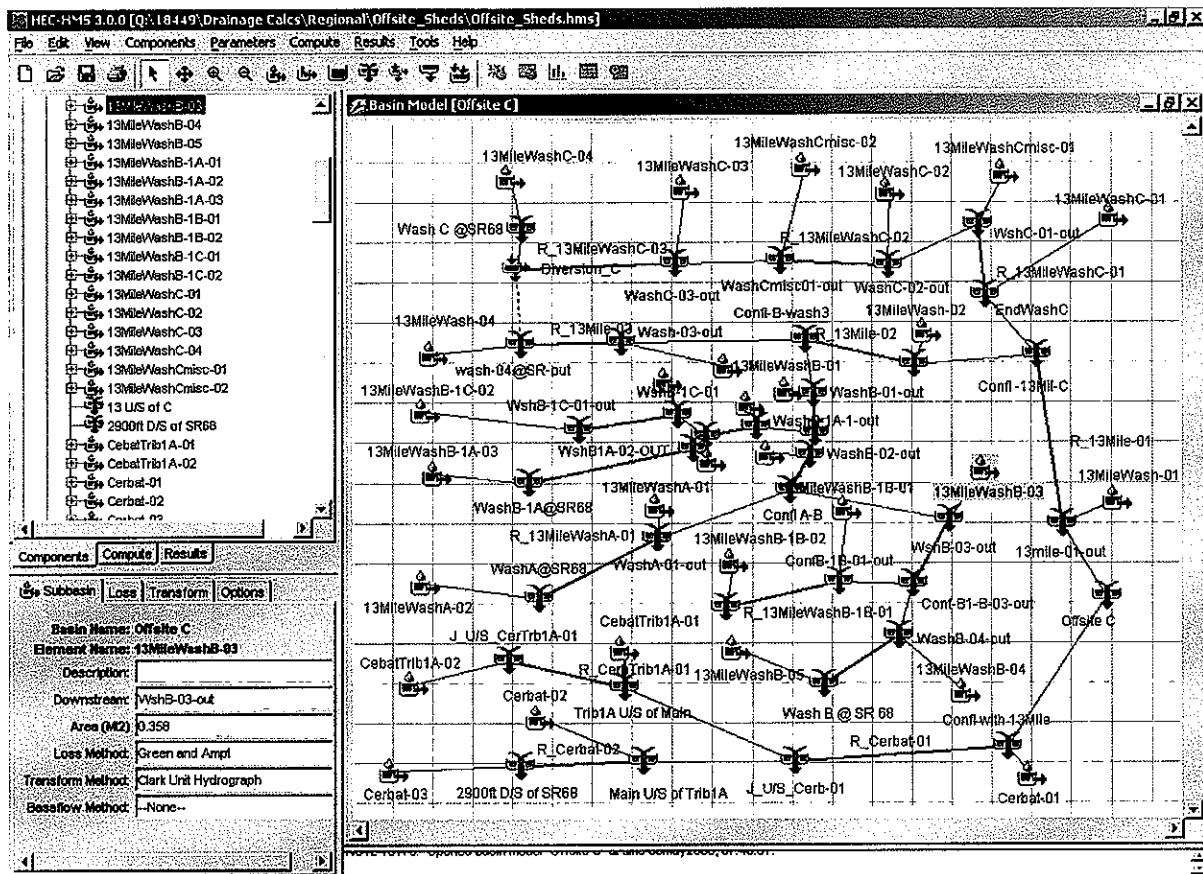




Golden Valley Ranch  
Technical Drainage Study

Golden Valley Ranch  
Technical Drainage Study

# Golden Valley Ranch Technical Drainage Study





# Golden Valley Ranch Technical Drainage Study

Project: Offsite C 100yr-24hr  
Description: Basin: Offsite C & Met: Offsite C 100yr-24hr & Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	21.152	4510.07	01Jan3000, 16:00	1276.76
13MileWash-01	0.0215	14.93	01Jan3000, 13:20	1.14
13MileWash-02	0.7827	185.84	01Jan3000, 14:30	46.97
13MileWash-03	1.5852	332.01	01Jan3000, 14:45	90.05
13MileWash-04	4.2919	920.76	01Jan3000, 14:45	229.9
13MileWashA-01	1.2028	248.8	01Jan3000, 14:40	71.22
13MileWashA-02	4.8114	1028.78	01Jan3000, 15:00	282.8
13MileWashB-01	0.4188	112.07	01Jan3000, 14:10	23.05
13MileWashB-02	0.057	43.21	01Jan3000, 13:25	3.2
13MileWashB-03	0.3592	259.9	01Jan3000, 13:20	21.56
13MileWashB-04	0.0449	19.05	01Jan3000, 13:45	2.16
13MileWashB-05	6.4185	1430.5	01Jan3000, 14:55	360.23
13MileWashB-1A-01	0.5987	226.13	01Jan3000, 14:00	35.91
13MileWashB-1A-02	0.1641	78.87	01Jan3000, 13:40	10.84
13MileWashB-1A-03	0.1314	71.79	01Jan3000, 13:40	9.25
13MileWashB-1B-01	0.0439	46.12	01Jan3000, 13:20	2.83
13MileWashB-1B-02	0.0675	59.43	01Jan3000, 13:25	4.56
13MileWashB-1C-01	0.1147	58.28	01Jan3000, 13:35	7.8
13MileWashB-1C-02	0.0593	56.82	01Jan3000, 13:20	3.32
13MileWashC-01	0.0375	20.4	01Jan3000, 13:25	1.81
13MileWashC-02	1.7953	522.46	01Jan3000, 14:30	107.75
13MileWashC-03	1.1533	300.26	01Jan3000, 14:25	67.82
13MileWashC-04	5.3401	1272	01Jan3000, 14:40	276.95
13MileWashCmisc-01	13.8253	2920.45	01Jan3000, 15:15	736.34
13MileWashCmisc-02	11.6593	2699.91	01Jan3000, 15:05	642.11
13mile-01-out	54.9843	10581.1	01Jan3000, 15:55	3040.17
2900ft D/S of SR68	10.083	1527.35	01Jan3000, 15:45	555.54
CebatTrib1A-01	0.5285	307.86	01Jan3000, 13:50	35.69
CebatTrib1A-02	0.8467	220.13	01Jan3000, 14:20	49.79
Cerbat-01	0.9269	336.59	01Jan3000, 14:10	56.8
Cerbat-02	3.6691	701.33	01Jan3000, 15:15	215.48
Cerbat-03	10.083	1527.35	01Jan3000, 15:45	555.54
Conf-B1-B-03-out	6.5748	1435.85	01Jan3000, 15:15	369.92
ConfB-1B-01-out	0.1114	94.63	01Jan3000, 13:25	7.39
Confl -13Mil-C	54.9628	10595.14	01Jan3000, 15:50	3038.69
Confl A-B	12.9482	2644.56	01Jan3000, 15:35	745.54
Confl with 13Mile	16.0542	2110.21	01Jan3000, 16:45	904.74
Confl-B-wash3	20.3693	4443.17	01Jan3000, 15:40	1230.35
ConflB02-B1-A	14.0734	2781.77	01Jan3000, 15:35	815.91
Diversion_C	5.3401	676.48	01Jan3000, 14:40	205.9
EndWashC	33.8108	6229.9	01Jan3000, 15:25	1761.92
J_U/S_CerTrb1A-01	0.8467	220.13	01Jan3000, 14:20	49.79
J_U/S_Cerb-01	15.1273	2068.9	01Jan3000, 16:20	851.71
Main U/S of Trib1A	13.7521	1947.19	01Jan3000, 16:30	766.18
Offsite C	71.0385	12504.16	01Jan3000, 16:00	3944.91
R_13Mile-01	54.9628	10580.89	01Jan3000, 15:55	3039.03
R_13Mile-02	20.3693	4416.65	01Jan3000, 16:05	1229.79
R_13Mile-03	4.2919	1507.88	01Jan3000, 15:30	301.33

**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
R_13MileWashA-01	4.8114	1026.77	01Jan3000, 15:35	282.84
R_13MileWashB-01	14.0734	2777.46	01Jan3000, 15:55	815.92
R_13MileWashB-02	12.9482	2642.5	01Jan3000, 15:40	745.54
R_13MileWashB-03	6.5748	1433.93	01Jan3000, 15:40	369.92
R_13MileWashB-04	6.4185	1429.37	01Jan3000, 15:15	360.37
R_13MileWashB-1A-01	0.4695	205.9	01Jan3000, 14:15	31.27
R_13MileWashB-1A-02	0.1314	71.58	01Jan3000, 14:05	9.26
R_13MileWashB-1B-01	0.0675	58.7	01Jan3000, 13:30	4.56
R_13MileWashB-1C-01	0.0593	55.92	01Jan3000, 13:30	3.33
R_13MileWashC-01	33.7733	6228.55	01Jan3000, 15:25	1760.11
R_13MileWashC-02	18.1527	3316.83	01Jan3000, 15:45	915.95
R_13MileWashC-03	5.3401	675.97	01Jan3000, 16:10	206.19
R_CerbTrib1A-01	0.8467	219.6	01Jan3000, 14:55	49.83
R_Cerbat-01	15.1273	2067.62	01Jan3000, 16:50	847.94
R_Cerbat-02	10.083	1524.37	01Jan3000, 16:45	550.7
Trib1A U/S of Main	1.3752	343.89	01Jan3000, 14:00	85.53
Wash B @ SR 68	6.4185	1430.5	01Jan3000, 14:55	360.23
Wash C @SR68	5.3401	1272	01Jan3000, 14:40	276.95
Wash-03-out	5.8771	1761.04	01Jan3000, 15:25	391.38
WashA-01-out	6.0142	1211.64	01Jan3000, 15:30	354.06
WashA@SR68	4.8114	1028.78	01Jan3000, 15:00	282.8
WashB-01-out	14.4922	2819.9	01Jan3000, 15:55	838.97
WashB-02-out	13.0052	2643.09	01Jan3000, 15:40	748.74
WashB-04-out	6.4634	1432.74	01Jan3000, 15:15	362.53
WashB-1A-1-out	1.0682	422.58	01Jan3000, 14:05	67.17
WashB-1A@SR68	0.1314	71.79	01Jan3000, 13:40	9.25
WashC-02-out	19.948	3566.47	01Jan3000, 15:45	1023.7
WashC-03-out	6.4934	802.9	01Jan3000, 15:45	274.02
WashCmisc01-out	18.1527	3352.91	01Jan3000, 15:20	916.13
WshB-03-out	6.934	1442.18	01Jan3000, 15:40	391.47
WshB-1B-01-out	0.0675	59.43	01Jan3000, 13:25	4.56
WshB-1C-01	0.174	111.64	01Jan3000, 13:30	11.13
WshB-1C-01-out	0.0593	56.82	01Jan3000, 13:20	3.32
WshB1-C1-A02-out	0.4695	206.2	01Jan3000, 13:50	31.22
WshB1A-02-OUT	0.2955	134.95	01Jan3000, 14:00	20.09
WshC-01-out	33.7733	6247.39	01Jan3000, 15:40	1760.04
wash-04@SR-out	4.2919	1515.59	01Jan3000, 14:45	300.95

### Golden Valley Ranch Technical Drainage Study

Project: Basin: Offsite C & Met: Offsite C 100yr-6hr & Control: Control 1  
 Description: Basin: Offsite C & Met: Offsite C 100yr-6hr & Control: Control 1

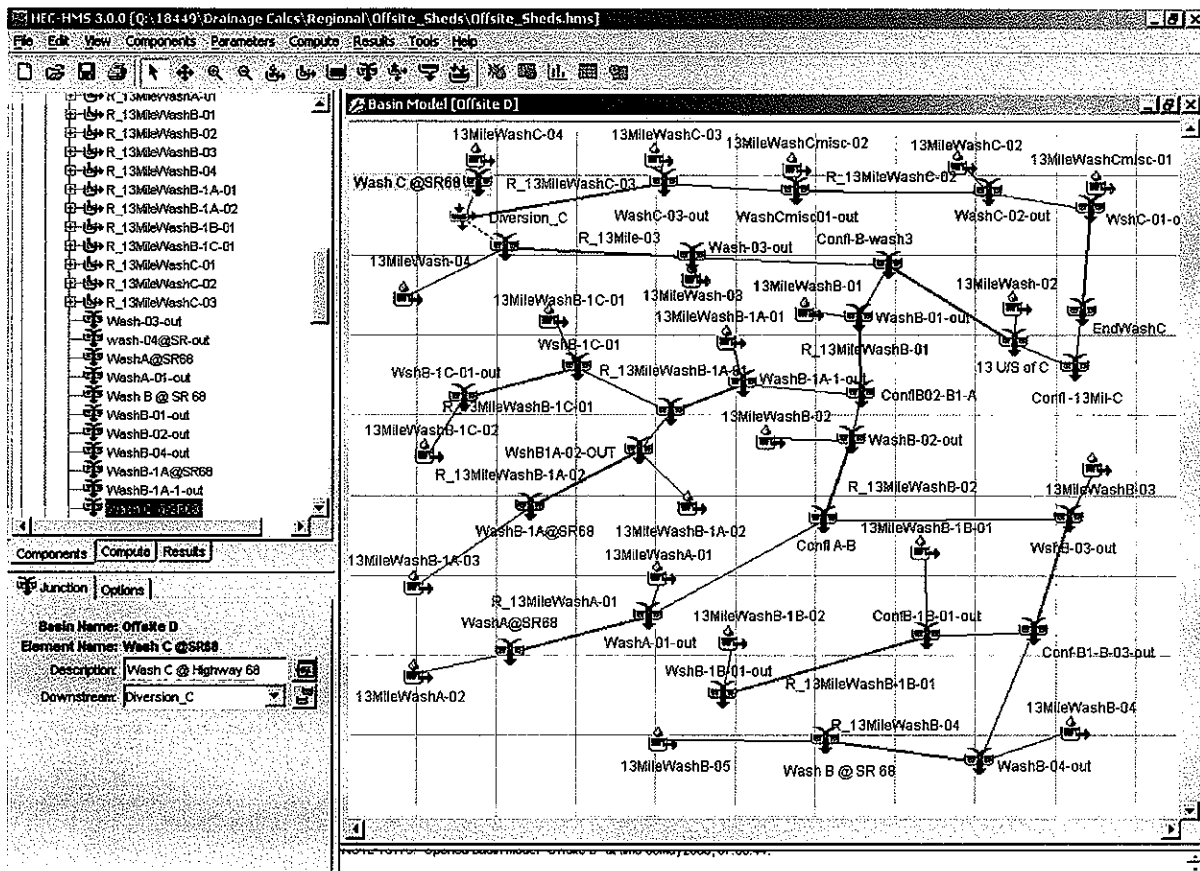
Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	21.152	2194.93	01Jan3000, 08:15	670.01
13MileWash-01	0.0215	6.01	01Jan3000, 05:25	0.56
13MileWash-02	0.7827	106.39	01Jan3000, 06:30	27.98
13MileWash-03	1.5852	177.36	01Jan3000, 06:45	49.25
13MileWash-04	4.2919	450.9	01Jan3000, 06:50	114.85
13MileWashA-01	1.2028	141.15	01Jan3000, 06:45	41.68
13MileWashA-02	4.8114	580.88	01Jan3000, 07:05	162.77
13MileWashB-01	0.4188	56	01Jan3000, 06:10	12.06
13MileWashB-02	0.057	18.94	01Jan3000, 05:30	1.72
13MileWashB-03	0.3592	121.45	01Jan3000, 05:30	12.84
13MileWashB-04	0.0449	6.8	01Jan3000, 05:50	0.81
13MileWashB-05	6.4185	757.08	01Jan3000, 07:00	193.77
13MileWashB-1A-01	0.5987	125.16	01Jan3000, 06:05	21.37
13MileWashB-1A-02	0.1641	46.58	01Jan3000, 05:50	7.5
13MileWashB-1A-03	0.1314	44.05	01Jan3000, 05:45	6.84
13MileWashB-1B-01	0.0439	21.78	01Jan3000, 05:25	1.89
13MileWashB-1B-02	0.0675	31.27	01Jan3000, 05:30	3.24
13MileWashB-1C-01	0.1147	34.85	01Jan3000, 05:45	5.58
13MileWashB-1C-02	0.0593	23.35	01Jan3000, 05:25	1.79
13MileWashC-01	0.0375	6.95	01Jan3000, 05:30	0.69
13MileWashC-02	1.7953	299.44	01Jan3000, 06:35	64.18
13MileWashC-03	1.1533	166.63	01Jan3000, 06:30	39.09
13MileWashC-04	5.3401	574.38	01Jan3000, 06:45	127.02
13MileWashCmisc-01	13.8253	1424.95	01Jan3000, 07:20	362.9
13MileWashCmisc-02	11.6593	1396.76	01Jan3000, 07:05	336.4
13mile-01-out	54.9843	5121.8	01Jan3000, 08:00	1597.1
2900ft D/S of SR68	10.083	805.01	01Jan3000, 07:45	298.24
CebatTrib1A-01	0.5285	187.63	01Jan3000, 05:55	25.36
CebatTrib1A-02	0.8467	121.88	01Jan3000, 06:25	28.7
Cerbat-01	0.9269	195.01	01Jan3000, 06:15	35
Cerbat-02	3.6691	397.32	01Jan3000, 07:15	124.13
Cerbat-03	10.083	805.01	01Jan3000, 07:45	298.24
Conf-B1-B-03-out	6.5748	759.72	01Jan3000, 07:25	199.79
ConfB-1B-01-out	0.1114	50.07	01Jan3000, 05:35	5.13
Confl -13Mil-C	54.9628	5125.11	01Jan3000, 07:55	1596.61
Confl A-B	12.9482	1426.8	01Jan3000, 07:40	417.01
Confl with 13Mile	16.0542	1163.31	01Jan3000, 08:45	511.55
Confl-B-wash3	20.3693	2146.16	01Jan3000, 07:45	642.06
ConflB02-B1-A	14.0734	1528.83	01Jan3000, 07:35	461.86
Diversion_C	5.3401	527.3	01Jan3000, 06:45	123.28
EndWashC	33.8108	3210.87	01Jan3000, 07:30	926.6
J_U/S_CerTrb1A-01	0.8467	121.88	01Jan3000, 06:25	28.7
J_U/S_Cerb-01	15.1273	1134.2	01Jan3000, 08:15	476.52
Main U/S of Trib1A	13.7521	1053.41	01Jan3000, 08:30	422.43
Offsite C	71.0385	6229.22	01Jan3000, 08:05	2108.66
R_13Mile-01	54.9628	5121.7	01Jan3000, 08:00	1596.55
R_13Mile-02	20.3693	2142.25	01Jan3000, 08:15	642.03
R_13Mile-03	4.2919	496.03	01Jan3000, 07:30	118.76

**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
R_13MileWashA-01	4.8114	579.19	01Jan3000, 07:30	162.77
R_13MileWashB-01	14.0734	1527.65	01Jan3000, 07:55	461.99
R_13MileWashB-02	12.9482	1426.11	01Jan3000, 07:40	417.01
R_13MileWashB-03	6.5748	757.78	01Jan3000, 07:50	199.72
R_13MileWashB-04	6.4185	756.09	01Jan3000, 07:25	193.85
R_13MileWashB-1A-01	0.4695	128.15	01Jan3000, 06:25	21.75
R_13MileWashB-1A-02	0.1314	43.84	01Jan3000, 06:20	6.86
R_13MileWashB-1B-01	0.0675	31.14	01Jan3000, 05:40	3.24
R_13MileWashB-1C-01	0.0593	23.24	01Jan3000, 05:35	1.79
R_13MileWashC-01	33.7733	3210.37	01Jan3000, 07:30	925.91
R_13MileWashC-02	18.1527	1615.42	01Jan3000, 08:10	498.89
R_13MileWashC-03	5.3401	525.68	01Jan3000, 08:20	123.43
R_CerbTrib1A-01	0.8467	121.57	01Jan3000, 07:05	28.73
R_Cerbat-01	15.1273	1133.67	01Jan3000, 08:50	476.55
R_Cerbat-02	10.083	803.25	01Jan3000, 08:45	298.3
Trib1A U/S of Main	1.3752	210.12	01Jan3000, 06:30	54.09
Wash B @ SR 68	6.4185	757.08	01Jan3000, 07:00	193.77
Wash C @SR68	5.3401	574.38	01Jan3000, 06:45	127.02
Wash-03-out	5.8771	636.81	01Jan3000, 07:30	168.01
WashA-01-out	6.0142	696.65	01Jan3000, 07:25	204.45
WashA@SR68	4.8114	580.88	01Jan3000, 07:05	162.77
WashB-01-out	14.4922	1550.87	01Jan3000, 07:55	474.05
WashB-02-out	13.0052	1426.5	01Jan3000, 07:40	418.73
WashB-04-out	6.4634	757.19	01Jan3000, 07:25	194.66
WashB-1A-1-out	1.0682	244.04	01Jan3000, 06:20	43.12
WashB-1A@SR68	0.1314	44.05	01Jan3000, 05:45	6.84
WashC-02-out	19.948	1789.04	01Jan3000, 07:20	563.07
WashC-03-out	6.4934	593.4	01Jan3000, 08:15	162.53
WashCmisc01-out	18.1527	1627.09	01Jan3000, 07:45	498.93
WshB-03-out	6.934	762.37	01Jan3000, 07:50	212.56
WshB-1B-01-out	0.0675	31.27	01Jan3000, 05:30	3.24
WshB-1C-01	0.174	57.11	01Jan3000, 05:40	7.37
WshB-1C-01-out	0.0593	23.35	01Jan3000, 05:25	1.79
WshB1-C1-A02-out	0.4695	128.58	01Jan3000, 06:00	21.73
WshB1A-02-OUT	0.2955	84.14	01Jan3000, 06:10	14.36
WshC-01-out	33.7733	3213.99	01Jan3000, 07:20	925.97
wash-04@SR-out	4.2919	497.29	01Jan3000, 06:45	118.59



# Golden Valley Ranch Technical Drainage Study



### Golden Valley Ranch Technical Drainage Study

Project: Offsite D 100yr-24hr  
Description: Basin: Offsite D & Met: Offsite D 100yr-24hr & Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	16.8601	3016.6	01Jan3000, 16:20	937.37
13MileWash-02	0.7827	171.51	01Jan3000, 14:30	43.15
13MileWash-03	1.5852	315.04	01Jan3000, 14:45	85.19
13MileWashA-01	1.2028	229.56	01Jan3000, 14:40	65.51
13MileWashA-02	4.8114	1002.78	01Jan3000, 15:00	275.24
13MileWashB-01	0.4188	111.46	01Jan3000, 14:10	22.85
13MileWashB-02	0.057	40.43	01Jan3000, 13:25	2.92
13MileWashB-03	0.3592	234.67	01Jan3000, 13:20	18.76
13MileWashB-04	0.0449	19.17	01Jan3000, 13:45	2.17
13MileWashB-05	6.4185	1420.68	01Jan3000, 14:55	357.43
13MileWashB-1A-01	0.5987	208.33	01Jan3000, 14:00	32.82
13MileWashB-1A-02	0.1641	67.04	01Jan3000, 13:40	8.95
13MileWashB-1A-03	0.1314	59.46	01Jan3000, 13:35	7.28
13MileWashB-1B-01	0.0439	40.53	01Jan3000, 13:20	2.33
13MileWashB-1B-02	0.0675	51.16	01Jan3000, 13:25	3.68
13MileWashB-1C-01	0.1147	49.11	01Jan3000, 13:35	6.3
13MileWashB-1C-02	0.0593	57.25	01Jan3000, 13:20	3.29
Conf-B1-B-03-out	6.5748	1425.94	01Jan3000, 15:15	365.78
ConfB-1B-01-out	0.1114	80.58	01Jan3000, 13:25	6.02
Confl A-B	12.9482	2591.23	01Jan3000, 15:35	725.38
Confl-B-wash3	16.0774	2945.23	01Jan3000, 15:50	894.96
ConflB02-B1-A	14.0734	2709.42	01Jan3000, 15:35	786.98
Offsite D	16.8601	3016.6	01Jan3000, 16:20	937.37
R_13Mile-02	16.0774	2941.95	01Jan3000, 16:20	894.22
R_13MileWashA-01	4.8114	1000.43	01Jan3000, 15:35	275.28
R_13MileWashB-01	14.0734	2705.26	01Jan3000, 15:55	786.92
R_13MileWashB-02	12.9482	2589.58	01Jan3000, 15:40	725.37
R_13MileWashB-03	6.5748	1423.57	01Jan3000, 15:40	365.83
R_13MileWashB-04	6.4185	1420.08	01Jan3000, 15:15	357.59
R_13MileWashB-1A-01	0.4695	169.68	01Jan3000, 14:15	25.88
R_13MileWashB-1A-02	0.1314	59.08	01Jan3000, 14:05	7.29
R_13MileWashB-1B-01	0.0675	50.52	01Jan3000, 13:30	3.69
R_13MileWashB-1C-01	0.0593	56.32	01Jan3000, 13:30	3.29
Wash B @ SR 68	6.4185	1420.68	01Jan3000, 14:55	357.43
Wash-03-out	1.5852	315.04	01Jan3000, 14:45	85.19
WashA-01-out	6.0142	1171.64	01Jan3000, 15:30	340.79
WashA@SR68	4.8114	1002.78	01Jan3000, 15:00	275.24
WashB-01-out	14.4922	2747.43	01Jan3000, 15:55	809.77
WashB-02-out	13.0052	2590.14	01Jan3000, 15:40	728.28
WashB-04-out	6.4634	1423.49	01Jan3000, 15:15	359.76
WashB-1A-1-out	1.0682	376.3	01Jan3000, 14:00	58.7
WashB-1A@SR68	0.1314	59.46	01Jan3000, 13:35	7.28
WshB-03-out	6.934	1430.8	01Jan3000, 15:40	384.59
WshB-1B-01-out	0.0675	51.16	01Jan3000, 13:25	3.68
WshB-1C-01	0.174	103.32	01Jan3000, 13:30	9.59
WshB-1C-01-out	0.0593	57.25	01Jan3000, 13:20	3.29
WshB1-C1-A02-out	0.4695	170.91	01Jan3000, 13:55	25.84
WshB1A-02-OUT	0.2955	110.65	01Jan3000, 14:00	16.24

**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
--------------------	--------------------------	-------------------------	--------------	----------------

### Golden Valley Ranch Technical Drainage Study

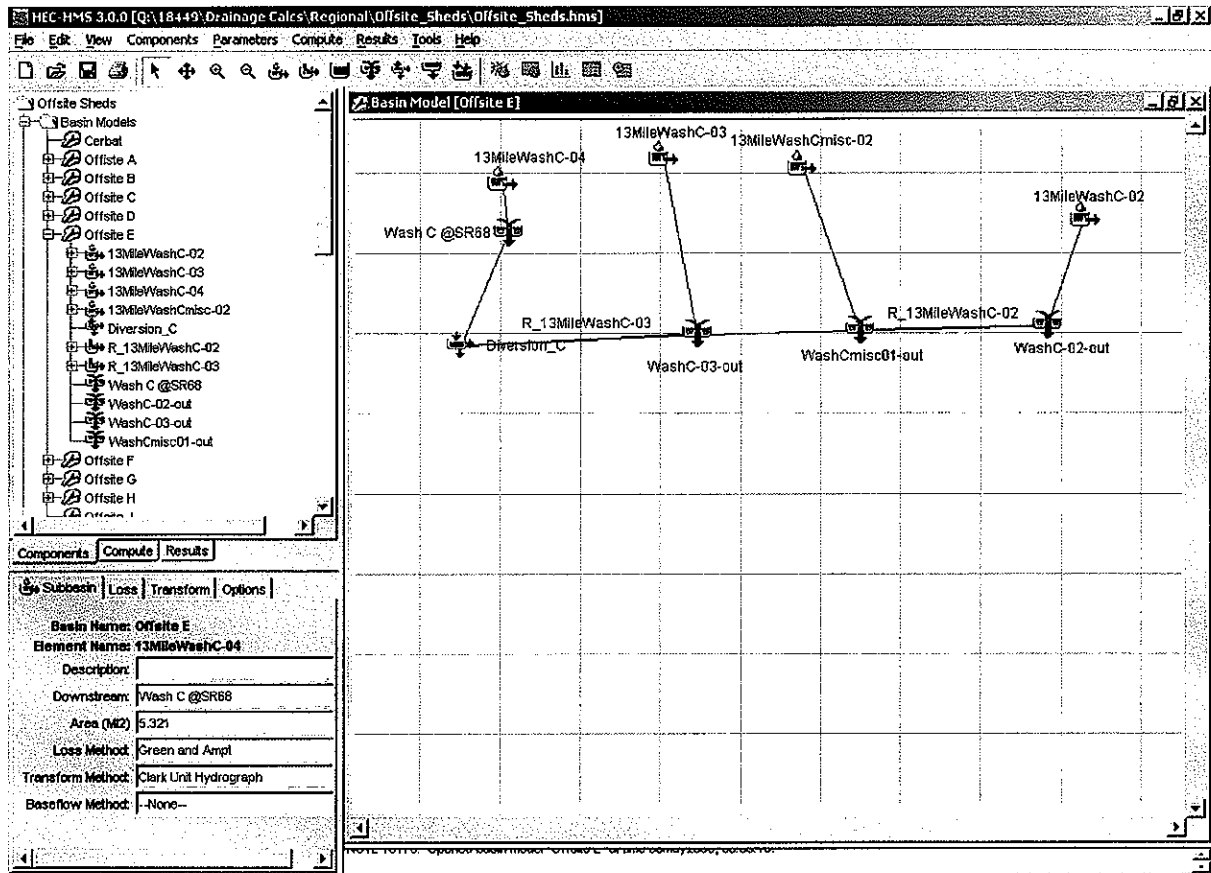
Project: Offsite D 100yr-6hr

Description: Basin: Offsite D &amp; Met: Offsite D 100yr-6hr &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	16.8601	1867.55	01Jan3000, 08:35	596.21
13MileWash-02	0.7827	104.56	01Jan3000, 06:30	26.91
13MileWash-03	1.5852	184.71	01Jan3000, 06:45	50.73
13MileWashA-01	1.2028	137.86	01Jan3000, 06:45	40.12
13MileWashA-02	4.8114	659.51	01Jan3000, 07:05	183.72
13MileWashB-01	0.4188	65.93	01Jan3000, 06:10	13.97
13MileWashB-02	0.057	19.27	01Jan3000, 05:25	1.61
13MileWashB-03	0.3592	114.28	01Jan3000, 05:25	10.69
13MileWashB-04	0.0449	9.09	01Jan3000, 05:50	1.08
13MileWashB-05	6.4185	892.13	01Jan3000, 07:00	227.24
13MileWashB-1A-01	0.5987	123.05	01Jan3000, 06:05	20.24
13MileWashB-1A-02	0.1641	38.24	01Jan3000, 05:45	5.47
13MileWashB-1A-03	0.1314	34.41	01Jan3000, 05:40	4.58
13MileWashB-1B-01	0.0439	19.28	01Jan3000, 05:20	1.35
13MileWashB-1B-02	0.0675	26.64	01Jan3000, 05:25	2.25
13MileWashB-1C-01	0.1147	28.04	01Jan3000, 05:40	3.9
13MileWashB-1C-02	0.0593	28.63	01Jan3000, 05:20	2.07
Conf-B1-B-03-out	6.5748	893.31	01Jan3000, 07:20	232.01
ConfB-1B-01-out	0.1114	41.84	01Jan3000, 05:30	3.61
Confl A-B	12.9482	1614.41	01Jan3000, 07:40	466.58
Confl-B-wash3	16.0774	1828.24	01Jan3000, 07:55	569.31
ConflB02-B1-A	14.0734	1689.96	01Jan3000, 07:40	504.48
Offsite D	16.8601	1867.55	01Jan3000, 08:35	596.21
R_13Mile-02	16.0774	1825.33	01Jan3000, 08:35	569.3
R_13MileWashA-01	4.8114	657.75	01Jan3000, 07:25	183.73
R_13MileWashB-01	14.0734	1687.89	01Jan3000, 08:00	504.61
R_13MileWashB-02	12.9482	1612.2	01Jan3000, 07:45	466.58
R_13MileWashB-03	6.5748	892.08	01Jan3000, 07:55	232.05
R_13MileWashB-04	6.4185	890.35	01Jan3000, 07:25	227.32
R_13MileWashB-1A-01	0.4695	99.26	01Jan3000, 06:25	16.06
R_13MileWashB-1A-02	0.1314	34.28	01Jan3000, 06:15	4.59
R_13MileWashB-1B-01	0.0675	26.42	01Jan3000, 05:40	2.25
R_13MileWashB-1C-01	0.0593	28.54	01Jan3000, 05:35	2.07
Wash B @ SR 68	6.4185	892.13	01Jan3000, 07:00	227.24
Wash-03-out	1.5852	184.71	01Jan3000, 06:45	50.73
WashA-01-out	6.0142	769.86	01Jan3000, 07:20	223.84
WashA@SR68	4.8114	659.51	01Jan3000, 07:05	183.72
WashB-01-out	14.4922	1713.09	01Jan3000, 08:00	518.58
WashB-02-out	13.0052	1612.47	01Jan3000, 07:45	468.18
WashB-04-out	6.4634	891.81	01Jan3000, 07:25	228.4
WashB-1A-1-out	1.0682	216.96	01Jan3000, 06:10	36.3
WashB-1A@SR68	0.1314	34.41	01Jan3000, 05:40	4.58
WshB-03-out	6.934	895.11	01Jan3000, 07:55	242.74
WshB-1B-01-out	0.0675	26.64	01Jan3000, 05:25	2.25
WshB-1C-01	0.174	55.93	01Jan3000, 05:35	5.97
WshB-1C-01-out	0.0593	28.63	01Jan3000, 05:20	2.07
WshB1-C1-A02-out	0.4695	100.06	01Jan3000, 06:00	16.03
WshB1A-02-OUT	0.2955	63.46	01Jan3000, 06:10	10.06



# Golden Valley Ranch Technical Drainage Study



# Golden Valley Ranch Technical Drainage Study

Project: Offsite E 100yr-24hr  
 Description: Basin: Offsite E & Met: Offsite E 100yr-24hr & Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13MileWashC-02	1.7953	573.71	01Jan3000, 14:30	118.42
13MileWashC-03	1.1533	330.43	01Jan3000, 14:25	74.72
13MileWashC-04	5.3401	1404.1	01Jan3000, 14:40	305.83
13MileWashCmisc-02	11.6593	2992.38	01Jan3000, 15:05	712.07
Diversion_C	5.3401	705.37	01Jan3000, 14:40	217.6
Offsite E	19.948	3941.06	01Jan3000, 15:40	1122.92
R_13MileWashC-02	18.1527	3664.05	01Jan3000, 15:45	1004.5
R_13MileWashC-03	5.3401	704.34	01Jan3000, 16:10	217.9
Wash C @SR68	5.3401	1404.1	01Jan3000, 14:40	305.83
WashC-03-out	6.4934	847.1	01Jan3000, 15:55	292.62
WashCmisc01-out	18.1527	3701.4	01Jan3000, 15:15	1004.69

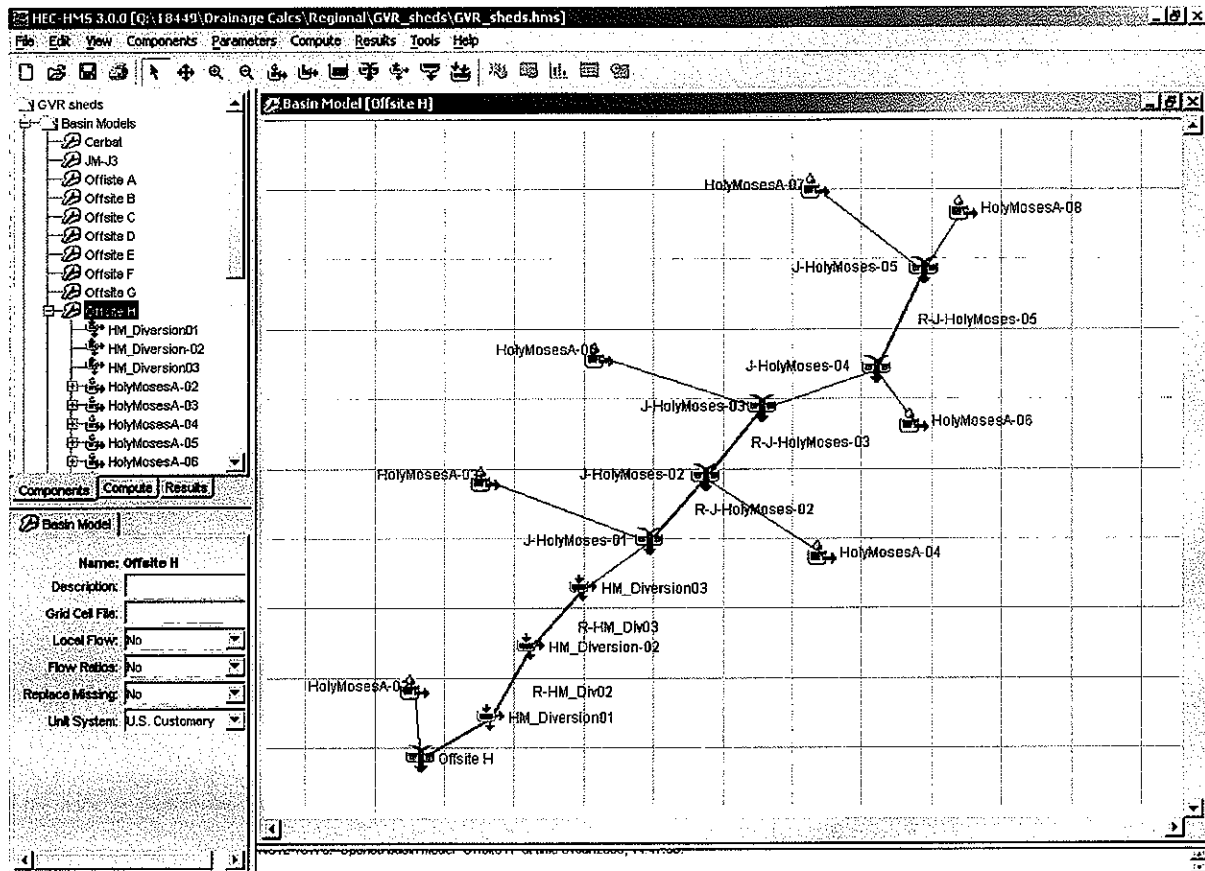
# Golden Valley Ranch Technical Drainage Study

Project: Offsite E 100yr-6hr

Description: Basin: Offsite E &amp; Met: Offsite E 100yr-6hr &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13MileWashC-02	1.7953	414.58	01Jan3000, 06:30	88.79
13MileWashC-03	1.1533	233.72	01Jan3000, 06:30	54.86
13MileWashC-04	5.3401	900.24	01Jan3000, 06:45	199.92
13MileWashCmisc-02	11.6593	2056.44	01Jan3000, 07:05	495.88
Diversion_C	5.3401	620.05	01Jan3000, 06:45	171.93
Offsite E	19.948	2708.3	01Jan3000, 07:50	811.65
R_13MileWashC-02	18.1527	2512.43	01Jan3000, 07:55	722.86
R_13MileWashC-03	5.3401	619.25	01Jan3000, 08:15	172.11
Wash C @SR68	5.3401	900.24	01Jan3000, 06:45	199.92
WashC-03-out	6.4934	723.52	01Jan3000, 08:00	226.97
WashCmisc01-out	18.1527	2531.72	01Jan3000, 07:30	722.86

# Golden Valley Ranch Technical Drainage Study





# Golden Valley Ranch Technical Drainage Study

Project: Offsite H 100yr-24hr  
Description: Basin: Offsite H & Met: Offsite H 100yr-24hr & Control: Control 1

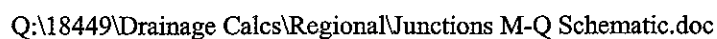
Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
HM_Diversion-02	57.1654	4141	01Jan3000, 15:25	2352.8
HM_Diversion01	57.1654	4030	01Jan3000, 15:50	2312.11
HM_Diversion03	57.1654	5228.95	01Jan3000, 18:15	2609.14
HolyMosesA-02	1.2132	303.82	01Jan3000, 14:35	73.26
HolyMosesA-03	3.8747	1347.96	01Jan3000, 14:15	210.81
HolyMosesA-04	8.2644	1707.34	01Jan3000, 15:20	524.45
HolyMosesA-05	4.2697	1202.6	01Jan3000, 14:35	230.92
HolyMosesA-06	8.149	1833.92	01Jan3000, 15:15	530.22
HolyMosesA-07	13.3273	2741.11	01Jan3000, 15:20	741.66
HolyMosesA-08	19.2803	3585.27	01Jan3000, 16:00	1290.96
J-HolyMoses-01	57.1654	9904.38	01Jan3000, 16:15	3520.92
J-HolyMoses-02	53.2907	9906.22	01Jan3000, 15:45	3314.87
J-HolyMoses-03	45.0263	8442.5	01Jan3000, 15:30	2792.75
J-HolyMoses-04	40.7566	7800.9	01Jan3000, 15:35	2561.84
J-HolyMoses-05	32.6076	6163.8	01Jan3000, 15:35	2032.62
Offsite H	58.3786	4119.53	01Jan3000, 16:50	2376.24
R-HM_Div01	57.1654	4030	01Jan3000, 19:45	2302.98
R-HM_Div02	57.1654	4141	01Jan3000, 19:30	2347.33
R-HM_Div03	57.1654	5120.15	01Jan3000, 18:40	2599.5
R-J-HolyMoses-02	53.2907	9713.99	01Jan3000, 16:20	3310.12
R-J-HolyMoses-03	45.0263	8327.84	01Jan3000, 15:55	2790.42
R-J-HolyMoses-05	32.6076	6147.66	01Jan3000, 15:50	2031.62

# **Golden Valley Ranch Technical Drainage Study**

Project: Offsite H 100yr-6hr

Description: Basin: Offsite H &amp; Met: Offsite H 100yr-6hr &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
HM_Diversion-02	57.1654	4141	01Jan3000, 09:25	1875.81
HM_Diversion01	57.1654	4030	01Jan3000, 08:45	1856.71
HM_Diversion03	57.1654	5240.34	01Jan3000, 09:00	2024.76
HolyMosesA-02	1.2132	164.41	01Jan3000, 06:40	40.72
HolyMosesA-03	3.8747	599.39	01Jan3000, 06:20	96.08
HolyMosesA-04	8.2644	1005.24	01Jan3000, 07:25	312.99
HolyMosesA-05	4.2697	531.12	01Jan3000, 06:35	103.65
HolyMosesA-06	8.149	1119.07	01Jan3000, 07:15	329.52
HolyMosesA-07	13.3273	1316.71	01Jan3000, 07:25	359.33
HolyMosesA-08	19.2803	2326.68	01Jan3000, 08:05	850.36
J-HolyMoses-01	57.1654	5634.03	01Jan3000, 08:25	2051.93
J-HolyMoses-02	53.2907	5650.3	01Jan3000, 07:55	1955.86
J-HolyMoses-03	45.0263	4803.62	01Jan3000, 07:35	1642.87
J-HolyMoses-04	40.7566	4531.17	01Jan3000, 07:45	1539.22
J-HolyMoses-05	32.6076	3537.1	01Jan3000, 07:45	1209.7
Offsite H	58.3786	4061.24	01Jan3000, 09:45	1897.44
R-HM_Div01	57.1654	4029.97	01Jan3000, 10:45	1856.71
R-HM_Div02	57.1654	4141	01Jan3000, 10:30	1875.81
R-HM_Div03	57.1654	5204.46	01Jan3000, 09:25	2024.76
R-J-HolyMoses-02	53.2907	5551.05	01Jan3000, 08:25	1955.86
R-J-HolyMoses-03	45.0263	4744.14	01Jan3000, 08:00	1642.87
R-J-HolyMoses-05	32.6076	3529.97	01Jan3000, 07:55	1209.7



# Golden Valley Ranch

## Technical Drainage Study

Project: Junction M 100yr-24hr

Description: Basin: JunctionM &amp; Met: Junction M 100yr-24hr &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	21.152	5633.35	01Jan3000, 16:00	2298.23
13MileWash-01	0.0215	17.49	01Jan3000, 13:20	2.01
13MileWash-02	0.7827	225.33	01Jan3000, 14:30	87.01
13MileWash-03	1.5852	405.23	01Jan3000, 14:40	162.46
13MileWash-04	4.2919	1126.15	01Jan3000, 14:45	406.56
13MileWashA-01	1.2028	304.38	01Jan3000, 14:40	131.04
13MileWashA-02	4.8114	1247.89	01Jan3000, 15:00	516.55
13MileWashB-01	0.4188	135.66	01Jan3000, 14:10	41.2
13MileWashB-02	0.057	50.25	01Jan3000, 13:25	5.75
13MileWashB-03	0.3592	219.4	01Jan3000, 13:45	39.93
13MileWashB-04	0.0449	32.45	01Jan3000, 13:20	3.59
13MileWashB-05	6.4185	1738.63	01Jan3000, 14:55	647.81
13MileWashB-1A-01	0.5987	269.21	01Jan3000, 14:00	66.79
13MileWashB-1A-02	0.1641	90.05	01Jan3000, 13:40	21.18
13MileWashB-1A-03	0.1314	80.75	01Jan3000, 13:40	18.44
13MileWashB-1B-01	0.0439	51.09	01Jan3000, 13:20	5.46
13MileWashB-1B-02	0.0675	65.83	01Jan3000, 13:25	9
13MileWashB-1C-01	0.1147	65.95	01Jan3000, 13:40	15.4
13MileWashB-1C-02	0.0593	65.14	01Jan3000, 13:20	5.96
13MileWashC-01	0.0375	24.65	01Jan3000, 13:25	3.03
13MileWashC-02	1.7953	625.51	01Jan3000, 14:30	199.58
13MileWashC-03	1.1533	362.91	01Jan3000, 14:25	124.46
13MileWashC-04	5.3401	1552.51	01Jan3000, 14:40	480.33
13MileWashCmisc-01	13.8256	3539.77	01Jan3000, 15:15	1293.56
13MileWashCmisc-02	11.6593	3257.25	01Jan3000, 15:05	1143.78
13MileWashE-01	1.0617	465.81	01Jan3000, 14:20	165.21
13MileWashE-02	0.357	85.67	01Jan3000, 14:40	27.58
13MileWashE-03	0.357	206.83	01Jan3000, 13:40	27.58
13mile-01-out	0.0215	17.3	01Jan3000, 13:35	2.01
2900ft D/S of SR68	10.083	1892.9	01Jan3000, 15:40	996.13
CebatTrib1A-01	0.5285	351.46	01Jan3000, 13:50	70.45
CebatTrib1A-02	0.8467	265.98	01Jan3000, 14:20	91.37
Cerbat-01	0.9269	400.46	01Jan3000, 14:10	106.77
Cerbat-02	3.6691	856.76	01Jan3000, 15:15	393.75
Cerbat-03	10.083	1892.9	01Jan3000, 15:40	996.13
Conf-B1-B-03-out	6.5748	1743.83	01Jan3000, 15:10	666.18
ConfB-1B-01-out	0.1114	106.4	01Jan3000, 13:25	14.48
Confl -13Mil-C	71.0388	15475.03	01Jan3000, 15:50	7079.65
Confl A-B	12.9482	3237.08	01Jan3000, 15:35	1353.76
Confl-B-wash3	20.3693	5526.62	01Jan3000, 15:40	2211.35
ConflB02-B1-A	14.0734	3410.1	01Jan3000, 15:35	1487.42
Diversion_C	5.3401	755.09	01Jan3000, 14:40	366.24
EndWashC	33.8111	7674.34	01Jan3000, 15:40	3130.97
J-M	72.8145	15559.96	01Jan3000, 16:00	7297.66
J_U/S_CerTrb1A-01	0.8467	265.98	01Jan3000, 14:20	91.37
J_U/S_Cerb-01	16.0542	2664.64	01Jan3000, 16:10	1652.76
Main U/S of Trib1A	13.7521	2423.64	01Jan3000, 16:25	1384.1
R-13MileWashE-01	71.0388	15229.51	01Jan3000, 16:00	7077.29



**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
R-13MileWashE-03	0.357	124.46	01Jan3000, 15:30	27.58
R_13Mile-01	0.0215	17.3	01Jan3000, 13:35	2.01
R_13Mile-02	20.3693	5515.74	01Jan3000, 16:00	2211.21
R_13Mile-03	4.2919	1909.15	01Jan3000, 15:30	520.37
R_13MileWashA-01	4.8114	1245.46	01Jan3000, 15:35	516.56
R_13MileWashB-01	14.0734	3406.49	01Jan3000, 15:55	1487.32
R_13MileWashB-02	12.9482	3234.49	01Jan3000, 15:35	1353.77
R_13MileWashB-03	6.5748	1740.62	01Jan3000, 15:40	666.23
R_13MileWashB-04	6.4185	1736.41	01Jan3000, 15:10	648.11
R_13MileWashB-1A-01	0.4695	241.28	01Jan3000, 14:15	61.11
R_13MileWashB-1A-02	0.1314	80.43	01Jan3000, 14:05	18.48
R_13MileWashB-1B-01	0.0675	65.43	01Jan3000, 13:30	9.02
R_13MileWashB-1C-01	0.0593	64.12	01Jan3000, 13:30	5.97
R_13MileWashC-01	33.7736	7673.18	01Jan3000, 15:40	3127.94
R_13MileWashC-02	18.1527	4004.5	01Jan3000, 15:40	1635.1
R_13MileWashC-03	5.3401	753.39	01Jan3000, 16:10	366.74
R_CerbTrib1A-01	0.8467	265.23	01Jan3000, 14:55	91.44
R_Cerbat-01	16.0542	2662.95	01Jan3000, 16:35	1648.44
R_Cerbat-02	10.083	1889.59	01Jan3000, 16:40	990.35
Trib1A U/S of Main	1.3752	421.37	01Jan3000, 14:25	161.88
Wash B @ SR 68	6.4185	1738.63	01Jan3000, 14:55	647.81
Wash C @SR68	5.3401	1552.51	01Jan3000, 14:40	480.33
Wash-03-out	5.8771	2221.65	01Jan3000, 15:25	682.83
WashA-01-out	6.0142	1474.82	01Jan3000, 15:30	647.6
WashA@SR68	4.8114	1247.89	01Jan3000, 15:00	516.55
WashB-01-out	14.4922	3458.18	01Jan3000, 15:55	1528.52
WashB-02-out	13.0052	3235.38	01Jan3000, 15:35	1359.52
WashB-04-out	6.4634	1738.6	01Jan3000, 15:10	651.7
WashB-1A-1-out	1.0682	505.1	01Jan3000, 14:05	127.9
WashB-1A@SR68	0.1314	80.75	01Jan3000, 13:40	18.44
WashC-02-out	19.948	4328.52	01Jan3000, 15:40	1834.68
WashC-03-out	6.4934	910.89	01Jan3000, 16:00	491.2
WashCmisc01-out	18.1527	4031.71	01Jan3000, 15:15	1634.97
WshB-03-out	6.934	1766.5	01Jan3000, 15:35	706.16
WshB-1B-01-out	0.0675	65.83	01Jan3000, 13:25	9
WshB-1C-01	0.4695	242.98	01Jan3000, 13:50	61.03
WshB-1C-01-out	0.0593	65.14	01Jan3000, 13:20	5.96
WshB1-C1-A02-out	0.4695	242.98	01Jan3000, 13:50	61.03
WshB1A-02-OUT	0.2955	156.14	01Jan3000, 14:00	39.66
WshC-01-out	33.7736	7697.4	01Jan3000, 15:35	3128.23
wash-04@SR-out	4.2919	1921.7	01Jan3000, 14:45	520.65

# Golden Valley Ranch Technical Drainage Study

Project: Junction M 100yr-6hr

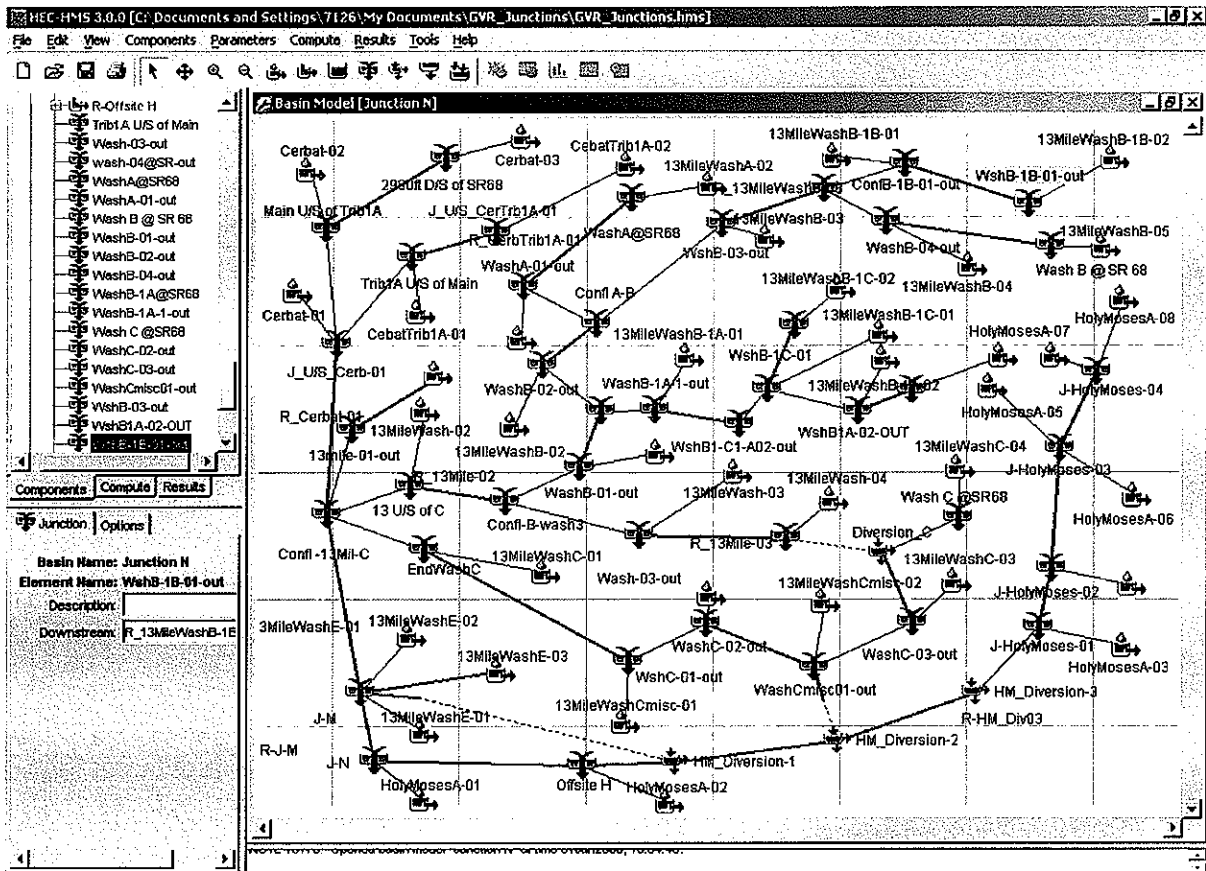
Description: Basin: JunctionM &amp; Met: Junction M 100yr-6hr &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	21.152	4153.38	01Jan3000, 16:00	1189.03
13MileWash-01	0.0215	14.04	01Jan3000, 13:20	1.07
13MileWash-02	0.7827	174.55	01Jan3000, 14:30	44.09
13MileWash-03	1.5852	310.47	01Jan3000, 14:45	84.14
13MileWash-04	4.2919	863.42	01Jan3000, 14:45	215.51
13MileWashA-01	1.2028	233.43	01Jan3000, 14:40	66.8
13MileWashA-02	4.8114	964.42	01Jan3000, 15:00	265
13MileWashB-01	0.4188	104.84	01Jan3000, 14:10	21.53
13MileWashB-02	0.057	40.59	01Jan3000, 13:25	2.99
13MileWashB-03	0.3592	176.11	01Jan3000, 13:45	20.23
13MileWashB-04	0.0449	25.29	01Jan3000, 13:20	2.01
13MileWashB-05	6.4185	1336.01	01Jan3000, 14:55	336.29
13MileWashB-1A-01	0.5987	212.46	01Jan3000, 14:00	33.69
13MileWashB-1A-02	0.1641	74.56	01Jan3000, 13:40	10.2
13MileWashB-1A-03	0.1314	68.09	01Jan3000, 13:40	8.71
13MileWashB-1B-01	0.0439	43.72	01Jan3000, 13:20	2.66
13MileWashB-1B-02	0.0675	56.39	01Jan3000, 13:25	4.29
13MileWashB-1C-01	0.1147	55.22	01Jan3000, 13:35	7.33
13MileWashB-1C-02	0.0593	53.49	01Jan3000, 13:20	3.1
13MileWashC-01	0.0375	19.05	01Jan3000, 13:25	1.69
13MileWashC-02	1.7953	490.68	01Jan3000, 14:30	101.12
13MileWashC-03	1.1533	281.55	01Jan3000, 14:25	63.54
13MileWashC-04	5.3401	1191.1	01Jan3000, 14:40	259.28
13MileWashCmisc-01	13.8256	2740.26	01Jan3000, 15:15	690.78
13MileWashCmisc-02	11.6593	2523.95	01Jan3000, 15:05	600.02
13MileWashE-01	1.0617	393.38	01Jan3000, 14:20	77.61
13MileWashE-02	0.357	63.82	01Jan3000, 14:45	15.56
13MileWashE-03	0.357	157.76	01Jan3000, 13:40	15.56
13mile-01-out	0.0215	13.94	01Jan3000, 13:35	1.07
2900ft D/S of SR68	10.083	1426.76	01Jan3000, 15:45	519.04
CebatTrib1A-01	0.5285	291.05	01Jan3000, 13:50	33.58
CebatTrib1A-02	0.8467	206.42	01Jan3000, 14:20	46.65
Cerbat-01	0.9269	316.66	01Jan3000, 14:10	53.39
Cerbat-02	3.6691	657.43	01Jan3000, 15:15	201.97
Cerbat-03	10.083	1426.76	01Jan3000, 15:45	519.04
Conf-B1-B-03-out	6.5748	1339.84	01Jan3000, 15:15	345.4
ConfB-1B-01-out	0.1114	89.46	01Jan3000, 13:25	6.95
Confl -13Mil-C	71.0388	11716.92	01Jan3000, 15:55	3693.1
Confl A-B	12.9482	2479.68	01Jan3000, 15:35	697.49
Confl-B-wash3	20.3693	4095.29	01Jan3000, 15:35	1145.58
ConflB02-B1-A	14.0734	2611.92	01Jan3000, 15:35	763.54
Diversion_C	5.3401	660.07	01Jan3000, 14:40	198.56
EndWashC	33.8111	5835.22	01Jan3000, 15:25	1656.13
J-M	72.8145	11779.12	01Jan3000, 16:05	3799.96
J_U/S_CerTrb1A-01	0.8467	206.42	01Jan3000, 14:20	46.65
J_U/S_Cerb-01	16.0542	1993.36	01Jan3000, 16:15	850.28
Main U/S of Trib1A	13.7521	1818.57	01Jan3000, 16:30	716.62
R-13MileWashE-01	71.0388	11539.21	01Jan3000, 16:05	3691.24

**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
R-13MileWashE-03	0.357	93.18	01Jan3000, 15:30	15.56
R_13Mile-01	0.0215	13.94	01Jan3000, 13:35	1.07
R_13Mile-02	20.3693	4064.02	01Jan3000, 16:00	1144.94
R_13Mile-03	4.2919	1388.02	01Jan3000, 15:30	276.36
R_13MileWashA-01	4.8114	961.77	01Jan3000, 15:35	265.02
R_13MileWashB-01	14.0734	2605.55	01Jan3000, 15:55	763.54
R_13MileWashB-02	12.9482	2476.94	01Jan3000, 15:40	697.47
R_13MileWashB-03	6.5748	1336.67	01Jan3000, 15:45	345.43
R_13MileWashB-04	6.4185	1335.46	01Jan3000, 15:15	336.44
R_13MileWashB-1A-01	0.4695	193.11	01Jan3000, 14:15	29.4
R_13MileWashB-1A-02	0.1314	67.85	01Jan3000, 14:05	8.72
R_13MileWashB-1B-01	0.0675	55.69	01Jan3000, 13:30	4.29
R_13MileWashB-1C-01	0.0593	52.62	01Jan3000, 13:30	3.11
R_13MileWashC-01	33.7736	5833.95	01Jan3000, 15:25	1654.44
R_13MileWashC-02	18.1527	3101.57	01Jan3000, 15:50	862.41
R_13MileWashC-03	5.3401	659.72	01Jan3000, 16:15	198.85
R_CerbTrib1A-01	0.8467	206	01Jan3000, 14:55	46.7
R_Cerbat-01	16.0542	1992.14	01Jan3000, 16:45	846.87
R_Cerbat-02	10.083	1424.23	01Jan3000, 16:45	514.65
Trib1A U/S of Main	1.3752	321.8	01Jan3000, 14:00	80.27
Wash B @ SR 68	6.4185	1336.01	01Jan3000, 14:55	336.29
Wash C @SR68	5.3401	1191.1	01Jan3000, 14:40	259.28
Wash-03-out	5.8771	1627.21	01Jan3000, 15:25	360.51
WashA-01-out	6.0142	1137.68	01Jan3000, 15:30	331.82
WashA@SR68	4.8114	964.42	01Jan3000, 15:00	265
WashB-01-out	14.4922	2645.2	01Jan3000, 15:55	785.07
WashB-02-out	13.0052	2477.5	01Jan3000, 15:40	700.45
WashB-04-out	6.4634	1336.94	01Jan3000, 15:15	338.45
WashB-1A-1-out	1.0682	396.56	01Jan3000, 14:05	63.09
WashB-1A@SR68	0.1314	68.09	01Jan3000, 13:40	8.71
WashC-02-out	19.948	3322.83	01Jan3000, 15:50	963.53
WashC-03-out	6.4934	784.5	01Jan3000, 15:50	262.4
WashCmisc01-out	18.1527	3141.22	01Jan3000, 15:20	862.42
WshB-03-out	6.934	1354.42	01Jan3000, 15:40	365.66
WshB-1B-01-out	0.0675	56.39	01Jan3000, 13:25	4.29
WshB-1C-01	0.4695	193.42	01Jan3000, 13:55	29.36
WshB-1C-01-out	0.0593	53.49	01Jan3000, 13:20	3.1
WshB1-C1-A02-out	0.4695	193.42	01Jan3000, 13:55	29.36
WshB1A-02-OUT	0.2955	127.19	01Jan3000, 14:00	18.92
WshC-01-out	33.7736	5835.81	01Jan3000, 15:15	1654.31
wash-04@SR-out	4.2919	1394.16	01Jan3000, 14:45	276.22

# Golden Valley Ranch Technical Drainage Study



# Golden Valley Ranch Technical Drainage Study

Project: Junction N 100yr-24h

Description: Basin: Junction N &amp; Met: Junction N 100yr-24hr &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	21.152	4241.12	01Jan3000, 16:00	1206.05
13MileWash-01	0.0215	14.21	01Jan3000, 13:20	1.08
13MileWash-02	0.7827	176.68	01Jan3000, 14:30	44.63
13MileWash-03	1.5852	314.53	01Jan3000, 14:45	85.26
13MileWash-04	4.2919	874.04	01Jan3000, 14:45	218.17
13MileWashA-01	1.2028	236.33	01Jan3000, 14:40	67.64
13MileWashA-02	4.8114	976.54	01Jan3000, 15:00	268.36
13MileWashB-01	0.4188	106.17	01Jan3000, 14:10	21.81
13MileWashB-02	0.057	41.08	01Jan3000, 13:25	3.03
13MileWashB-03	0.3592	178.21	01Jan3000, 13:45	20.48
13MileWashB-04	0.0449	25.62	01Jan3000, 13:20	2.04
13MileWashB-05	6.4185	1353.81	01Jan3000, 14:55	340.8
13MileWashB-1A-01	0.5987	215.03	01Jan3000, 14:00	34.11
13MileWashB-1A-02	0.1641	75.37	01Jan3000, 13:40	10.32
13MileWashB-1A-03	0.1314	68.79	01Jan3000, 13:40	8.81
13MileWashB-1B-01	0.0439	44.18	01Jan3000, 13:20	2.69
13MileWashB-1B-02	0.0675	56.96	01Jan3000, 13:25	4.34
13MileWashB-1C-01	0.1147	55.8	01Jan3000, 13:35	7.42
13MileWashB-1C-02	0.0593	54.12	01Jan3000, 13:20	3.15
13MileWashC-01	0.0375	19.31	01Jan3000, 13:25	1.71
13MileWashC-02	1.7953	496.66	01Jan3000, 14:30	102.37
13MileWashC-03	1.1533	285.08	01Jan3000, 14:25	64.35
13MileWashC-04	5.3401	1206.34	01Jan3000, 14:40	262.61
13MileWashCmisc-01	13.8256	2774.1	01Jan3000, 15:15	699.34
13MileWashCmisc-02	11.6593	2556.1	01Jan3000, 15:05	607.71
13MileWashE-01	1.0617	397.49	01Jan3000, 14:20	78.48
13MileWashE-02	0.357	64.74	01Jan3000, 14:45	15.78
13MileWashE-03	0.357	159.94	01Jan3000, 13:40	15.78
13mile-01-out	0.0215	14.08	01Jan3000, 13:35	1.08
2900ft D/S of SR68	10.083	1445.3	01Jan3000, 15:45	525.81
CebatTrib1A-01	0.5285	294.2	01Jan3000, 13:50	33.97
CebatTrib1A-02	0.8467	209	01Jan3000, 14:20	47.24
Cerbat-01	0.9269	320.42	01Jan3000, 14:10	54.03
Cerbat-02	3.6691	665.7	01Jan3000, 15:15	204.52
Cerbat-03	10.083	1445.3	01Jan3000, 15:45	525.81
Conf-B1-B-03-out	6.5748	1357.3	01Jan3000, 15:15	349.99
ConfB-1B-01-out	0.1114	90.43	01Jan3000, 13:25	7.03
Confl -13Mil-C	71.0388	11895.72	01Jan3000, 15:55	3943.4
Confl A-B	12.9482	2514.89	01Jan3000, 15:35	706.48
Confl-B-wash3	20.3693	4175.95	01Jan3000, 15:35	1161.66
ConflB02-B1-A	14.0734	2646.89	01Jan3000, 15:35	773.37
Diversion_C	5.3401	662.36	01Jan3000, 14:40	199.93
EndWashC	33.8111	5908.22	01Jan3000, 15:25	1878.67
HM_Diversion-1	57.1654	4140.61	01Jan3000, 20:35	2206.89
HM_Diversion-2	57.1654	4141	01Jan3000, 17:20	2261.64
HM_Diversion-3	57.1654	5230.87	01Jan3000, 18:00	2488.13
HolyMosesA-01	3.3	663.43	01Jan3000, 14:50	147.87
HolyMosesA-02	1.2132	265.9	01Jan3000, 14:35	64.02

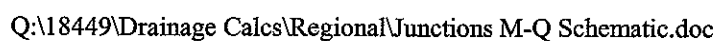


**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
HolyMosesA-03	3.8747	1178.6	01Jan3000, 14:15	184.16
HolyMosesA-04	8.2644	1501.9	01Jan3000, 15:20	461.13
HolyMosesA-05	4.2697	1051	01Jan3000, 14:35	201.55
HolyMosesA-06	8.149	1619.86	01Jan3000, 15:15	468.08
HolyMosesA-07	13.3273	2405.05	01Jan3000, 15:20	650.53
HolyMosesA-08	19.2803	3180.54	01Jan3000, 16:00	1145.2
J-HolyMoses-01	57.1654	8732.47	01Jan3000, 16:15	3103.86
J-HolyMoses-02	53.2907	8736.23	01Jan3000, 15:45	2923.64
J-HolyMoses-03	45.0263	7450.98	01Jan3000, 15:30	2464.51
J-HolyMoses-04	32.6076	5445.17	01Jan3000, 15:35	1795.73
J-M	72.8145	11960.23	01Jan3000, 16:05	4051.57
J-N	134.4931	11948.2	01Jan3000, 16:55	6038.2
J_U/S_CerTrb1A-01	0.8467	209	01Jan3000, 14:20	47.24
J_U/S_Cerb-01	16.0542	2019.3	01Jan3000, 16:15	861.07
Main U/S of Trib1A	13.7521	1842.52	01Jan3000, 16:30	725.78
Offsite H	58.3786	4136.44	01Jan3000, 21:50	2146.85
R-13MileWashE-01	71.0388	11717.25	01Jan3000, 16:05	3941.52
R-13MileWashE-03	0.357	94.51	01Jan3000, 15:30	15.78
R-Div01	0	0	01Jan3000, 01:00	0
R-Div02	0	836.83	01Jan3000, 20:15	203.08
R-HM_Div01	57.1654	4130.82	01Jan3000, 21:55	2082.82
R-HM_Div02	57.1654	4140.61	01Jan3000, 20:35	2206.89
R-HM_Div03	57.1654	5049.93	01Jan3000, 19:00	2464.72
R-J-HolyMoses-02	53.2907	8566.37	01Jan3000, 16:20	2919.69
R-J-HolyMoses-03	45.0263	7349.82	01Jan3000, 15:55	2462.52
R-J-HolyMoses-04	32.6076	5432.01	01Jan3000, 15:50	1794.88
R-J-M	72.8145	11567.64	01Jan3000, 16:55	4041.11
R-Offsite H	58.3786	4101.88	01Jan3000, 23:30	1849.23
R_13Mile-01	0.0215	14.08	01Jan3000, 13:35	1.08
R_13Mile-02	20.3693	4150.66	01Jan3000, 16:00	1161.42
R_13Mile-03	4.2919	1412.1	01Jan3000, 15:30	281.15
R_13MileWashA-01	4.8114	974.1	01Jan3000, 15:35	268.37
R_13MileWashB-01	14.0734	2640.17	01Jan3000, 15:55	773.45
R_13MileWashB-02	12.9482	2511.31	01Jan3000, 15:40	706.48
R_13MileWashB-03	6.5748	1354.65	01Jan3000, 15:40	349.99
R_13MileWashB-04	6.4185	1352.86	01Jan3000, 15:15	340.92
R_13MileWashB-1A-01	0.4695	195.5	01Jan3000, 14:15	29.75
R_13MileWashB-1A-02	0.1314	68.54	01Jan3000, 14:05	8.82
R_13MileWashB-1B-01	0.0675	56.26	01Jan3000, 13:30	4.34
R_13MileWashB-1C-01	0.0593	53.4	01Jan3000, 13:30	3.15
R_13MileWashC-01	33.7736	5906.93	01Jan3000, 15:25	1876.95
R_13MileWashC-02	18.1527	3138.32	01Jan3000, 15:50	1075.33
R_13MileWashC-03	5.3401	661.86	01Jan3000, 16:15	200.29
R_CerbTrib1A-01	0.8467	208.58	01Jan3000, 14:55	47.29
R_Cerbat-01	16.0542	2018.08	01Jan3000, 16:45	857.6
R_Cerbat-02	10.083	1442.83	01Jan3000, 16:45	521.26
Trib1A U/S of Main	1.3752	325.94	01Jan3000, 14:00	81.25
Wash B @ SR 68	6.4185	1353.81	01Jan3000, 14:55	340.8
Wash C @SR68	5.3401	1206.34	01Jan3000, 14:40	262.61
Wash-03-out	5.8771	1653.4	01Jan3000, 15:25	366.4

**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
WashA-01-out	6.0142	1151.65	01Jan3000, 15:30	336.01
WashA@SR68	4.8114	976.54	01Jan3000, 15:00	268.36
WashB-01-out	14.4922	2680.33	01Jan3000, 15:55	795.25
WashB-02-out	13.0052	2511.88	01Jan3000, 15:40	709.51
WashB-04-out	6.4634	1354.36	01Jan3000, 15:15	342.96
WashB-1A-1-out	1.0682	401.46	01Jan3000, 14:05	63.86
WashB-1A@SR68	0.1314	68.79	01Jan3000, 13:40	8.81
WashC-02-out	19.948	3370.88	01Jan3000, 15:45	1177.7
WashC-03-out	6.4934	787.84	01Jan3000, 15:50	264.64
WashCmisc01-out	18.1527	3179.5	01Jan3000, 15:20	1075.43
WshB-03-out	6.934	1373.17	01Jan3000, 15:40	370.47
WshB-1B-01-out	0.0675	56.96	01Jan3000, 13:25	4.34
WshB-1C-01	0.4695	195.77	01Jan3000, 13:50	29.71
WshB-1C-01-out	0.0593	54.12	01Jan3000, 13:20	3.15
WshB1-C1-A02-out	0.4695	195.77	01Jan3000, 13:50	29.71
WshB1A-02-OUT	0.2955	128.61	01Jan3000, 14:00	19.14
WshC-01-out	33.7736	5909.08	01Jan3000, 15:15	1877.04
wash-04@SR-out	4.2919	1417.68	01Jan3000, 14:45	280.85



# Golden Valley Ranch Technical Drainage Study

Project: Junction Q 100yr-24

Description: Basin: Junction Q &amp; Met: Junction Q 100yr-24 &amp; Control: Control 1

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
13 U/S of C	21.152	4011.75	01Jan3000, 15:55	1158.1
13MileWash-01	0.0215	13.72	01Jan3000, 13:20	1.04
13MileWash-02	0.7827	170.48	01Jan3000, 14:30	43.04
13MileWash-03	1.5852	302.7	01Jan3000, 14:45	82.01
13MileWash-04	4.2919	843.06	01Jan3000, 14:45	210.4
13MileWashA-01	1.2028	227.89	01Jan3000, 14:40	65.2
13MileWashA-02	4.8114	941.2	01Jan3000, 15:00	258.58
13MileWashB-01	0.4188	102.36	01Jan3000, 14:10	21.01
13MileWashB-02	0.057	39.67	01Jan3000, 13:25	2.91
13MileWashB-03	0.3592	172.09	01Jan3000, 13:45	19.75
13MileWashB-04	0.0449	24.65	01Jan3000, 13:20	1.96
13MileWashB-05	6.4185	1302.95	01Jan3000, 14:55	327.91
13MileWashB-1A-01	0.5987	207.52	01Jan3000, 14:00	32.89
13MileWashB-1A-02	0.1641	73.01	01Jan3000, 13:40	9.97
13MileWashB-1A-03	0.1314	66.76	01Jan3000, 13:40	8.52
13MileWashB-1B-01	0.0439	42.86	01Jan3000, 13:20	2.6
13MileWashB-1B-02	0.0675	55.3	01Jan3000, 13:25	4.19
13MileWashB-1C-01	0.1147	54.12	01Jan3000, 13:35	7.17
13MileWashB-1C-02	0.0593	52.33	01Jan3000, 13:20	3.03
13MileWashC-01	0.0375	18.57	01Jan3000, 13:25	1.64
13MileWashC-02	1.7953	479.21	01Jan3000, 14:30	98.73
13MileWashC-03	1.1533	274.8	01Jan3000, 14:25	62
13MileWashC-04	5.3401	1161.9	01Jan3000, 14:40	252.9
13MileWashCmisc-01	13.8256	2675.41	01Jan3000, 15:15	674.39
13MileWashCmisc-02	11.6593	2463.74	01Jan3000, 15:05	585.62
13MileWashE-01	1.0617	385.5	01Jan3000, 14:20	75.93
13MileWashE-02	0.357	62.07	01Jan3000, 14:45	15.12
13MileWashE-03	0.357	153.59	01Jan3000, 13:40	15.12
13mile-01-out	0.0215	13.61	01Jan3000, 13:35	1.05
2900ft D/S of SR68	10.083	1391.97	01Jan3000, 15:45	506.33
6-02Out	21.8989	2731.68	01Jan3000, 16:55	1155.21
6C-03Out	0.4592	222.6	01Jan3000, 13:45	30.75
6D-01Out	0.7264	268.93	01Jan3000, 14:10	53.77
CebatTrib1A-01	0.5285	285	01Jan3000, 13:50	32.84
CebatTrib1A-02	0.8467	201.48	01Jan3000, 14:20	45.52
Cerbat-01	0.9269	309.48	01Jan3000, 14:10	52.16
Cerbat-02	3.6691	641.6	01Jan3000, 15:15	197.07
Cerbat-03	10.083	1391.97	01Jan3000, 15:45	506.33
Conf-B1-B-03-out	6.5748	1307	01Jan3000, 15:15	336.79
ConfB-1B-01-out	0.1114	87.61	01Jan3000, 13:25	6.8
Confl -13Mil-C	71.0388	11408.63	01Jan3000, 15:55	3839.76
Confl A-B	12.9482	2415.08	01Jan3000, 15:35	680.34
Confl-B-wash3	20.3693	3943.51	01Jan3000, 15:30	1115.56
ConflB02-B1-A	14.0734	2536.21	01Jan3000, 15:40	744.87
Diversion_C	5.3401	657	01Jan3000, 14:40	195.9
End of Trib6C	1.6596	570.87	01Jan3000, 14:50	117.36
EndWashC	33.8111	5696.33	01Jan3000, 15:25	1854.32
HM-Div03	57.1654	5235.23	01Jan3000, 15:00	2451.43

**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
HM_Div01	57.1654	4030	01Jan3000, 18:25	2155.73
HM_Div02	57.1654	4141	01Jan3000, 16:10	2208.02
HolyMosesA-01	3.3	636.34	01Jan3000, 14:50	141.79
HolyMosesA-02	1.2132	494.7	01Jan3000, 14:05	61.68
HolyMosesA-03	3.8747	1133.57	01Jan3000, 14:15	177.08
HolyMosesA-04	8.2644	1447.28	01Jan3000, 15:20	444.29
HolyMosesA-05	4.2697	1010.7	01Jan3000, 14:35	193.74
HolyMosesA-06	8.149	1562.96	01Jan3000, 15:15	451.56
HolyMosesA-07	13.3273	2315.69	01Jan3000, 15:20	626.3
HolyMosesA-08	19.2803	3074.74	01Jan3000, 16:00	1107.02
J-HolyMoses-01	57.1654	8422.08	01Jan3000, 16:15	2993.43
J-HolyMoses-02	53.2907	8426.42	01Jan3000, 15:45	2820.17
J-HolyMoses-03	45.0263	7188.73	01Jan3000, 15:30	2377.8
J-HolyMoses-04	32.6076	5255.69	01Jan3000, 15:35	1733.32
J-M	72.8145	11478.95	01Jan3000, 16:05	3963.12
J-N	134.4931	11578.25	01Jan3000, 16:55	6191.6
J-Q	274.9937	21487.04	01Jan3000, 17:55	13527.32
J-SacWash-01	133.9649	10421.39	01Jan3000, 21:25	7256.87
J-SacWash-02	129.1579	10449.53	01Jan3000, 21:05	7046.22
J-SacWash-03	106.1743	9953.01	01Jan3000, 20:10	5969.66
J-SacWash-04	104.0491	10064.92	01Jan3000, 19:25	5893.34
J-SacWash-05	86.6442	9032.19	01Jan3000, 19:20	4947.55
J-SacWash-06	70.4152	8919.01	01Jan3000, 19:00	4019.25
J-SacWash-07	65.2222	8770.78	01Jan3000, 18:25	3680.66
J-SacWash-08	54.9677	8879.69	01Jan3000, 16:20	3124.79
J-SacWash-09	32.1654	6464.67	01Jan3000, 16:15	1975.03
J_D/S_SacTrib6-01	22.561	2787.91	01Jan3000, 16:55	1201.08
J_D/S_SacTrib6-02	22.5341	2788.93	01Jan3000, 16:50	1201.27
J_D/S_SacTrib6-03	21.8473	2732.42	01Jan3000, 16:50	1153.89
J_D/S_SacTrib6-04	19.9542	2566.43	01Jan3000, 16:35	1027.33
J_D/S_SacTrib6C-01	1.3683	508.65	01Jan3000, 14:25	97.85
J_D/S_SacTrib6C-02	1.1856	466.69	01Jan3000, 14:00	84.52
J_U/S_CerTrb1A-01	0.8467	201.48	01Jan3000, 14:20	45.52
J_U/S_Cerb-01	16.0542	1943.82	01Jan3000, 16:15	829.65
Main U/S of Trib1A	13.7521	1773.68	01Jan3000, 16:30	699.09
Offsite H	58.3786	4030	01Jan3000, 20:25	2198
R-13MileWashE-01	71.0388	11238.83	01Jan3000, 16:05	3837.93
R-13MileWashE-03	0.357	77.44	01Jan3000, 16:00	15.12
R-Div01	0	109.73	01Jan3000, 20:00	19
R-Div02	0	857.07	01Jan3000, 20:15	235.54
R-HM_Div01	57.1654	4030	01Jan3000, 20:25	2136.33
R-HM_Div02	57.1654	4140.54	01Jan3000, 19:45	2174.73
R-HM_Div03	57.1654	5133.22	01Jan3000, 18:20	2443.56
R-J-HolyMoses-02	53.2907	8262.52	01Jan3000, 16:20	2816.35
R-J-HolyMoses-03	45.0263	7091.18	01Jan3000, 15:55	2375.88
R-J-HolyMoses-04	32.6076	5243.37	01Jan3000, 15:50	1732.5
R-J-SacWash-01	133.9649	10419.38	01Jan3000, 21:35	7155.66
R-J-SacWash-02	129.1579	10421.39	01Jan3000, 21:25	6986.38
R-J-SacWash-03	106.1743	9765.44	01Jan3000, 21:15	5821.72
R-J-SacWash-04	104.0491	9938.74	01Jan3000, 20:10	5837.61



**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
R-J-SacWash-05	86.6442	8967.86	01Jan3000, 19:35	4934.11
R-J-SacWash-06	70.4152	8859.6	01Jan3000, 19:20	4004.88
R-J-SacWash-07	65.2222	8714.54	01Jan3000, 19:05	3659.58
R-J-SacWash-08	32.1654	6372.82	01Jan3000, 16:35	1974.03
R-J-SacWash-09	54.9677	8172.32	01Jan3000, 18:30	3088.75
R-JL	72.8145	11110.4	01Jan3000, 16:55	3952.86
R-JM	134.4931	11287.9	01Jan3000, 18:00	6057.66
R-OffsiteH	58.3786	4025.06	01Jan3000, 21:35	2096.96
R-SacWashA-11	13.9298	3626.03	01Jan3000, 16:25	964.8
R-SacWashB-01	14.1515	1655.02	01Jan3000, 17:30	741.09
R-SacWashD-01	5.3076	1895.38	01Jan3000, 14:35	298.18
R-SacWashE-01	2.0957	591.19	01Jan3000, 15:50	103.72
R_13Mile-01	0.0215	13.61	01Jan3000, 13:35	1.05
R_13Mile-02	20.3693	3921.37	01Jan3000, 16:00	1115.05
R_13Mile-03	4.2919	1343.42	01Jan3000, 15:25	267.7
R_13MileWashA-01	4.8114	938.59	01Jan3000, 15:30	258.6
R_13MileWashB-01	14.0734	2532.41	01Jan3000, 15:55	744.84
R_13MileWashB-02	12.9482	2413.13	01Jan3000, 15:40	680.33
R_13MileWashB-03	6.5748	1303.48	01Jan3000, 15:45	336.79
R_13MileWashB-04	6.4185	1302.73	01Jan3000, 15:15	328.03
R_13MileWashB-1A-01	0.4695	188.91	01Jan3000, 14:15	28.74
R_13MileWashB-1A-02	0.1314	66.5	01Jan3000, 14:05	8.53
R_13MileWashB-1B-01	0.0675	54.6	01Jan3000, 13:30	4.2
R_13MileWashB-1C-01	0.0593	51.63	01Jan3000, 13:30	3.04
R_13MileWashC-01	33.7736	5695.1	01Jan3000, 15:25	1852.67
R_13MileWashC-02	18.1527	3033	01Jan3000, 15:50	1079.58
R_13MileWashC-03	5.3401	656.67	01Jan3000, 16:15	196.2
R_CerbTrib1A-01	0.8467	201.1	01Jan3000, 14:55	45.56
R_Cerbat-01	16.0542	1942.77	01Jan3000, 16:45	826.3
R_Cerbat-02	10.083	1389.85	01Jan3000, 16:45	502.02
R_SacTrib6-01	22.5341	2787.91	01Jan3000, 16:55	1199.89
R_SacTrib6-02	21.8473	2731.68	01Jan3000, 16:55	1152.8
R_SacTrib6-03	19.9542	2563.92	01Jan3000, 16:55	1024.61
R_SacTrib6-04	19.5342	2553.27	01Jan3000, 16:35	1006.38
R_SacTrib6C-01	1.3683	507.21	01Jan3000, 14:50	97.91
R_SacTrib6C-02	1.1856	464.96	01Jan3000, 14:30	84.6
R_SacTrib6C-03	0.2518	114.07	01Jan3000, 14:00	16.9
R_SacTrib6D-01	0.4351	163.61	01Jan3000, 14:15	32.21
SacTrib6-01	0.0269	15.93	01Jan3000, 13:20	1.2
SacTrib6-02	0.0516	39.75	01Jan3000, 13:20	2.41
SacTrib6-03	0.2335	82.78	01Jan3000, 13:50	11.92
SacTrib6-04	0.42	147.7	01Jan3000, 13:55	20.95
SacTrib6-05	19.5342	2553.68	01Jan3000, 16:20	1009.03
SacTrib6C-01	0.2913	130.17	01Jan3000, 13:50	19.45
SacTrib6C-02	0.1827	133.64	01Jan3000, 13:35	13.25
SacTrib6C-03	0.2074	139.34	01Jan3000, 13:35	13.85
SacTrib6C-04	0.2518	114.84	01Jan3000, 13:50	16.88
SacTrib6D-01	0.2913	111.31	01Jan3000, 14:00	21.56
SacTrib6D-02	0.4351	164.23	01Jan3000, 14:05	32.2
SacTrib6misc-01	0.6352	197.09	01Jan3000, 14:20	46.06

**Golden Valley Ranch  
Technical Drainage Study**

Hydrologic Element	Drainage Area (sq mi)	Peak Discharge (cfs)	Time of Peak	Volume (ac-ft)
SacWashA-01	4.44	883.82	01Jan3000, 14:50	210.28
SacWashA-02	4.807	1260.14	01Jan3000, 14:50	270.49
SacWashA-03	0.4226	155.1	01Jan3000, 14:00	23.42
SacWashA-04	2.1252	633.33	01Jan3000, 14:35	132.06
SacWashA-05	3.2534	982.5	01Jan3000, 14:45	218.15
SacWashA-06	1.0804	362.23	01Jan3000, 14:15	62.17
SacWashA-07	9.841	2273.59	01Jan3000, 15:15	582.32
SacWashA-08	5.193	1258.58	01Jan3000, 15:05	359.68
SacWashA-09	10.2545	1756.84	01Jan3000, 15:40	591.91
SacWashA-10	2.7732	725.79	01Jan3000, 14:40	155.8
SacWashA-11	13.9298	3839.49	01Jan3000, 15:15	964.8
SacWashA-12	18.2356	2940.76	01Jan3000, 15:55	1010.23
SacWashB-01	5.3076	1972.61	01Jan3000, 14:15	298.18
SacWashC-01	10.3994	1290.71	01Jan3000, 16:00	525.88
SacWashC-02	9.6297	1341.96	01Jan3000, 15:35	469.08
SacWashD-01	14.1515	1714.1	01Jan3000, 16:25	753.74
SacWashE-01	2.0957	832.76	01Jan3000, 14:05	103.72
T6 U/S of T6C	20.1877	2569.96	01Jan3000, 16:55	1036.53
Trib 6C - LODS	0.2518	114.84	01Jan3000, 13:50	16.88
Trib 6D - LODS	0.4351	164.23	01Jan3000, 14:05	32.2
Trib1A U/S of Main	1.3752	313.99	01Jan3000, 14:00	78.4
Trib6 @ Hwy68	19.5342	2553.68	01Jan3000, 16:20	1009.03
Wash B @ SR 68	6.4185	1302.95	01Jan3000, 14:55	327.91
Wash C @SR68	5.3401	1161.9	01Jan3000, 14:40	252.9
Wash-03-out	5.8771	1578.46	01Jan3000, 15:25	349.71
WashA-01-out	6.0142	1111.48	01Jan3000, 15:25	323.8
WashA@SR68	4.8114	941.2	01Jan3000, 15:00	258.58
WashB-01-out	14.4922	2571.12	01Jan3000, 15:55	765.85
WashB-02-out	13.0052	2413.67	01Jan3000, 15:40	683.24
WashB-04-out	6.4634	1304.17	01Jan3000, 15:15	329.99
WashB-1A-1-out	1.0682	387.28	01Jan3000, 14:05	61.63
WashB-1A@SR68	0.1314	66.76	01Jan3000, 13:40	8.52
WashC-02-out	19.948	3249.04	01Jan3000, 15:50	1178.31
WashC-03-out	6.4934	777.55	01Jan3000, 15:50	258.2
WashCmisc01-out	18.1527	3065.08	01Jan3000, 15:20	1079.37
WshB-03-out	6.934	1320.56	01Jan3000, 15:40	356.55
WshB-1B-01-out	0.0675	55.3	01Jan3000, 13:25	4.19
WshB-1C-01	0.4695	189.03	01Jan3000, 13:55	28.7
WshB-1C-01-out	0.0593	52.33	01Jan3000, 13:20	3.03
WshB1-C1-A02-out	0.4695	189.03	01Jan3000, 13:55	28.7
WshB1A-02-OUT	0.2955	124.39	01Jan3000, 14:00	18.5
WshC-01-out	33.7736	5696.64	01Jan3000, 15:15	1852.7
wash-04@SR-out	4.2919	1347.85	01Jan3000, 14:45	267.41

**Golden Valley Ranch  
Technical Drainage Study**

Area (sq mi)	Area1	BASIN_TXT	Dtheta	PSIF	XKSAT
0.0215	598820.46	13MileWash-01	0.35	4.8	0.27
0.7827	21820460.19	13MileWash-02	0.39	5.8	0.16
1.5852	44191903.32	13MileWash-03	0.38	5.4	0.20
4.2919	119652267.53	13MileWash-04	0.35	4.9	0.26
1.2028	33531280.91	13MileWashA-01	0.39	5.6	0.17
4.8114	134135050.33	13MileWashA-02	0.38	5.5	0.18
0.4188	11674517.76	13MileWashB-01	0.36	5.2	0.23
0.0570	1590415.47	13MileWashB-02	0.37	5.4	0.21
0.3592	10014036.65	13MileWashB-03	0.39	5.8	0.16
0.0449	1251457.27	13MileWashB-04	0.35	4.1	0.38
6.4185	178938740.34	13MileWashB-05	0.37	5.4	0.21
0.5987	16692069.69	13MileWashB-1A-01	0.4	6.2	0.15
0.1641	4573520.84	13MileWashB-1A-02	0.35	7	0.11
0.1314	3664221.00	13MileWashB-1A-03	0.32	7.5	0.09
0.0439	1222874.48	13MileWashB-1B-01	0.37	6.6	0.12
0.0675	1882302.92	13MileWashB-1B-02	0.35	7.2	0.10
0.1147	3198738.21	13MileWashB-1C-01	0.35	7	0.10
0.0593	1654372.26	13MileWashB-1C-02	0.36	5.2	0.22
0.0375	1046016.37	13MileWashC-01	0.35	4.2	0.37
1.7953	50050905.12	13MileWashC-02	0.39	5.8	0.16
1.1533	32152693.93	13MileWashC-03	0.39	5.8	0.17
5.3401	148873841.13	13MileWashC-04	0.35	4.5	0.30
13.8253	385428429.67	13MileWashCmisc-01	0.35	4.6	0.28
11.6593	325043962.49	13MileWashCmisc-02	0.35	5	0.24
0.9269	25841320.16	Cerbat-01	0.4	6.2	0.14
3.6691	102289951.81	Cerbat-02	0.38	5.5	0.18
10.0830	281098232.37	cerbat-03	0.36	5	0.23
0.5285	14734078.89	CerbatTrib1A-01	0.35	7.2	0.10
0.8467	23604562.69	CerbatTribA-02	0.39	5.8	0.17
0.0269	751192.67	SacTrib6-01	0.35	4.2	0.36
0.0516	1439773.07	SacTrib6-02	0.35	4.5	0.31
0.2335	6510759.79	SacTrib6-03	0.36	5.2	0.22
0.4200	11708838.00	SacTrib6-04	0.36	5	0.24
19.5342	544582702.21	SacTrib6-05	0.37	5.4	0.20
0.2913	8119810.41	SacTrib6C-01	0.305	7.9	0.08
0.1827	5092941.65	SacTrib6C-02	0.29	8.4	0.06
0.2074	5781644.19	SacTrib6C-03	0.305	7.9	0.08
0.2518	7020344.16	SacTrib6C-04	0.32	7.5	0.08
0.2913	8120158.58	Sactrib6D-01	0.27	8.2	0.06
0.4351	12130144.53	SacTrib6D-02	0.27	8.2	0.06
0.6352	17707406.05	SacTrib6misc-01	0.29	8.4	0.06
0.3570	9951908.11	13MileWashE-03	0.35	4.1	0.40
1.2132	33823072.41	MolyMosesA-02	0.35	4.9	0.25
3.8747	108020770.80	HolyMosesA-03	0.35	4.4	0.33
7.8524	218911672.67	HolyMosesA-04	0.39	5.8	0.17
4.2697	119031114.50	HolyMosesA-05	0.35	4.3	0.34
13.3273	371544655.60	HolyMosesA-07	0.35	4.4	0.31
1.1335	31599959.82	Offsite Diverted-01	0.36	5.2	0.23
0.1161	3237668.17	Offsite Diverted-02	0.37	5.3	0.21
4.8070	134011258.03	SacWashA-02	0.4	6.2	0.14
0.4226	11782476.84	SacWashA-03	0.4	6	0.15

**Golden Valley Ranch  
Technical Drainage Study**

Area (sq mi)	Area1	BASIN_TXT	Dtheta	PSIF	XKSAT
2.1252	59246948.06	SacWashA-04	0.35	7.2	0.10
3.2534	90699043.03	SacWashA-05	0.32	7.5	0.08
1.0804	30119664.05	SacWashA-06	0.39	6.4	0.13
9.8410	274352090.03	SacWashA-07	0.36	6.8	0.12
8.1490	227180971.21	HolyMosesA-06	0.4	6	0.15
5.1930	144771184.51	SacWashA08	0.305	7.9	0.07
8.2644	230397565.60	HolyMosesA-04	0.39	5.8	0.17
10.2545	285879402.73	SacWashA-09	0.37	6.6	0.13
2.7732	77312465.22	SacWashA-10	0.39	6.4	0.14
13.9298	388340569.95	SacWashA-11	0.305	7.9	0.07
18.2356	508380337.44	SacWashA-12	0.4	6	0.15
5.3076	147968686.67	SacWashB-01	0.39	6.4	0.14
10.3994	289918143.24	SacWashC-01	0.38	5.4	0.20
9.6297	268461945.80	SacWashC-02	0.35	4.9	0.26
14.1515	394520757.54	SacWashD-01	0.39	5.8	0.16
1.0617	29599748.90	13MileWashE-01	0.305	7.9	0.08
19.2803	537503459.73	HolyMosesA-08	0.4	6	0.16
2.0957	58425519.68	SacWashE-01	0.35	5	0.25
3.2959	91885234.73	HolyMosesA_01	0.35	4.1	0.39
4.4406	123797707.70	SacWashA_01	0.35	4.5	0.30
1.9345	53931988.07	13MileWashD_02	0.35	4.1	0.40

# Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
754424	1116253	754424	3173094	gravelly sandy loam	GR-SL	GR-SL	0.4
754424	1116253	754424	3173095	very gravelly sandy clay loam	GRV-SCL		
754424	1116253	754424	3560131	weathered bedrock	WB		
754424	1116253	754424	3891879	weathered bedrock	WB		
754435	1116260	754435	3173380	gravelly sandy loam	GR-SL	GR-SL	0.4
754435	1116260	754435	3173379	extremely gravelly sandy loam	GRX-SL		
754435	1116260	754435	3173378	very cobbly sandy clay loam	CBV-SCL		
754435	1116260	754435	3560132	weathered bedrock	WB		
754435	1144848	754435	3306758	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
754435	1144848	754435	3306757	extremely cobbly sandy loam	CBX-SL		
754435	1144848	754435	3560133	weathered bedrock	WB		
754435	1144848	754435	3560103	unweathered bedrock	UWB		
754484	1116687	754484	3169552	extremely cobbly loam	CBX-L	CBX-L	0.25
754484	1116687	754484	3169553	extremely cobbly loam	CBX-L		
754484	1116687	754484	3560100	unweathered bedrock	UWB		
754484	1130129	754484	3226835	extremely cobbly loam	CBX-L	CBX-L	0.25
754484	1130129	754484	3226834	very cobbly loam	CBV-L		
754484	1130129	754484	3226833	extremely cobbly clay loam	CBX-CL		
754484	1130129	754484	3560039	cemented	CEM		
754484	1130129	754484	3560130	weathered bedrock	WB		
754484	1130129	754484	3560102	unweathered bedrock	UWB		
754484	1146142	754484	3322099	extremely gravelly sandy clay loam	GRX-SCL	CBV-CL	0.04
754484	1146142	754484	3322100	very cobbly clay loam	CBV-CL		
754484	1146142	754484	3322101	extremely stony clay loam	STX-CL		
754484	1146142	754484	3560101	unweathered bedrock	UWB		
755184	1117396	755184	3359183	cobbly loam	CB-L	GRV-CL	0.04
755184	1117396	755184	3359184	very gravelly clay loam	GRV-CL		
755184	1117396	755184	3359185	very gravelly sandy clay loam	GRV-SCL		
755184	1117396	755184	3359186	very gravelly coarse sandy loam	GRV-COSL		
755184	1117396	755184	3359187	very gravelly loamy coarse sand	GRV-LCOS		
755184	1117397	755184	3184595	very gravelly sandy loam	GRV-SL	STV-SCL	0.06
755184	1117397	755184	3184594	very stony sandy clay loam	STV-SCL		
755184	1117397	755184	3184593	very gravelly clay loam	GRV-CL		
755184	1117397	755184	3184592	very gravelly sandy clay loam	GRV-SCL		
755184	1117397	755184	3184591	very gravelly coarse sandy loam	GRV-COSL		
755184	1117397	755184	3560042	cemented	CEM		
755705	1117595	755705	3175899	gravelly sandy loam	GR-SL	GR-SL	0.4
755705	1117595	755705	3175898	gravelly sandy loam	GR-SL		
755705	1117595	755705	3175897	very gravelly sandy clay loam	GRV-SCL		
755705	1117595	755705	3175896	very gravelly sandy clay loam	GRV-SCL		
755705	1117595	755705	3175895	very cobbly sandy loam	CBV-SL		
755705	1117596	755705	3175471	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
755705	1117596	755705	3175485	very gravelly sandy loam	GRV-SL		
755705	1117596	755705	3175486	very gravelly sandy clay loam	GRV-SCL		
755705	1117596	755705	3175487	very gravelly sandy loam	GRV-SL		
755705	1117596	755705	3175488	very gravelly sandy loam	GRV-SL		
755705	1117596	755705	3175497	extremely gravelly sandy loam	GRX-SL		



### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
755705	1144905	755705	3309054	gravelly sandy loam	GR-SL	GR-SL	0.4
755705	1144905	755705	3309055	very cobbly sandy loam	CBV-SL		
755705	1144905	755705	3309056	very cobbly sandy loam	CBV-SL		
755705	1144905	755705	3309057	extremely cobbly sandy loam	CBX-SL		
1507864	652474	1507864	1385860	extremely cobbly loam	CBX-L	CBX-L	0.25
1507864	652474	1507864	1385861	extremely cobbly loam	CBX-L		
1507864	652474	1507864	1385862	unweathered bedrock	UWB		
1507865	652477	1507865	1385863	extremely cobbly loam	CBX-L	CBX-L	0.25
1507865	652477	1507865	1385864	extremely cobbly loam	CBX-L		
1507865	652477	1507865	1385865	unweathered bedrock	UWB		
1507866	652480	1507866	1385866	cobbly loam	CB-L	CB-L	0.25
1507866	652480	1507866	1385867	gravelly loam	GR-L		
1507866	652480	1507866	1385868	indurated	IND		
1507866	652480	1507866	1385869	extremely gravelly sand	GRX-S		
1507867	652481	1507867	3833006	cobbly loam	CB-L	CB-L	0.25
1507867	652481	1507867	3833007	gravelly loam	GR-L		
1507867	652481	1507867	3833008	indurated	IND		
1507867	652481	1507867	3833009	extremely gravelly sand	GRX-S		
1507868	652482	1507868	1385874	sandy loam	SL	SL	0.4
1507868	652482	1507868	1385875	sandy loam	SL		
1507868	652482	1507868	1385876	loamy coarse sand	LCOS		
1507869	652483	1507869	1385877	sandy loam	SL	SL	0.4
1507869	652483	1507869	1385878	sandy loam	SL		
1507869	652483	1507869	1385879	loamy coarse sand	LCOS		
1507870	652484	1507870	1385880	gravelly sandy loam	GR-SL	GR-SL	0.4
1507870	652484	1507870	1385881	gravelly coarse sandy loam	GR-COSL		
1507870	652484	1507870	1385882	gravelly sandy loam	GR-SL		
1507870	652485	1507870	3839329	gravelly loamy sand	GR-LS	GR-LS	1.2
1507870	652485	1507870	3839330	gravelly loamy coarse sand	GR-LCOS		
1507870	652485	1507870	3839331	very gravelly coarse sand	GRV-COS		
1507871	652486	1507871	4352498	very cobbly silt loam	CBV-SIL	SICL	0.04
1507871	652486	1507871	1385887	silty clay loam	SICL		
1507871	652486	1507871	4352499	cobbly silty clay	CB-SIC		
1507871	652486	1507871	4352500	silty clay	SIC		
1507871	652486	1507871	4352603	silty clay	SIC		
1507871	652486	1507871	1385890	gravelly silty clay loam	GR-SICL		
1507871	652487	1507871	1385891	extremely cobbly loam	CBX-L	CBX-L	0.25
1507871	652487	1507871	1385892	extremely cobbly loam	CBX-L		
1507871	652487	1507871	1385893	unweathered bedrock	UWB		
1507872	652489	1507872	3833596	gravelly sandy loam	GR-SL	GR-SL	0.4
1507872	652489	1507872	3833597	gravelly sandy loam	GR-SL		
1507872	652489	1507872	3833598	sandy loam	SL		
1507872	652489	1507872	3833599	extremely gravelly loamy sand	GRX-LS		
1507872	652489	1507872	3833600	very gravelly loamy coarse sand	GRV-LCOS		
1507872	652490	1507872	1385899	sandy loam	SL	SL	0.4
1507872	652490	1507872	1385900	loamy sand	LS		
1507872	652490	1507872	1385901	gravelly loamy sand	GR-LS		
1507874	652495	1507874	1385910	very gravelly sandy loam	GRV-SL	GRV-SCL	0.06
1507874	652495	1507874	1385911	very gravelly sandy clay loam	GRV-SCL		
1507874	652495	1507874	1385912	indurated	IND		
1507874	652495	1507874	1385913	unweathered bedrock	UWB		

### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507875	652496	1507875	1385914	very cobbly silty clay loam	CBV-SICL	C	0.01
1507875	652496	1507875	1385915	clay	C		
1507875	652496	1507875	1385916	very gravelly loam	GRV-L		
1507876	652497	1507876	3833789	very cobbly silty clay loam	CBV-SICL	C	0.01
1507876	652497	1507876	3833790	clay	C		
1507876	652497	1507876	3833791	very gravelly loam	GRV-L		
1507876	652498	1507876	1385920	very cobbly loam	CBV-L	SC	0.02
1507876	652498	1507876	1385921	sandy clay	SC		
1507876	652498	1507876	1385922	weathered bedrock	WB		
1507876	652498	1507876	1385923	unweathered bedrock	UWB		
1507877	652499	1507877	1385924	sand	S	S	4.6
1507877	652499	1507877	1385925	very fine sand	VFS		
1507877	652499	1507877	1385926	fine sand	FS		
1507877	652499	1507877	1385927	very fine sand	VFS		
1507878	652500	1507878	1385928	sandy loam	SL	SCL	0.06
1507878	652500	1507878	1385929	sandy clay loam	SCL		
1507878	652500	1507878	1385930	coarse sandy loam	COSL		
1507879	652501	1507879	1385931	extremely gravelly loam	GRX-L	GR-SCL	0.04
1507879	652501	1507879	1385932	gravelly sandy clay loam	GR-SCL		
1507879	652501	1507879	1385933	gravelly clay loam	GR-CL		
1507879	652501	1507879	1385934	indurated	IND		
1507880	652502	1507880	1385935	extremely gravelly loam	GRX-L	GR-CL	0.04
1507880	652502	1507880	1385936	gravelly clay loam	GR-CL		
1507880	652502	1507880	1385937	sandy clay loam	SCL		
1507880	652502	1507880	1385938	very gravelly loam	GRV-L		
1507880	652502	1507880	1385939	indurated	IND		
1507880	652502	1507880	1385940	extremely gravelly loamy sand	GRX-LS		
1507881	652503	1507881	3834372	extremely gravelly loam	GRX-L	SCL	0.06
1507881	652503	1507881	3834373	sandy clay loam	SCL		
1507881	652503	1507881	3834374	sandy clay loam	SCL		
1507881	652503	1507881	3834375	very gravelly loam	GRV-L		
1507881	652503	1507881	3834376	indurated	IND		
1507881	652503	1507881	3834377	extremely gravelly loamy sand	GRX-LS		
1507882	652504	1507882	3833990	very gravelly loamy sand	GRV-LS	LS	1.2
1507882	652504	1507882	3833991	loamy sand	LS		
1507882	652504	1507882	3833992	very gravelly coarse sand	GRV-COS		
1507883	652505	1507883	1385947	very gravelly loamy sand	GRV-LS	LS	1.2
1507883	652505	1507883	1385948	loamy sand	LS		
1507883	652505	1507883	1385949	very gravelly coarse sand	GRV-COS		
1507885	652508	1507885	1385952	very gravelly coarse sand	GRV-COS		
1507885	652508	1507885	1385953	extremely gravelly loamy coarse sand	GRX-LCOS		
1507886	652510	1507886	3834613	gravelly sandy loam	GR-SL	GR-SL	0.4
1507886	652510	1507886	3834614	gravelly coarse sandy loam	GR-COSL		
1507886	652510	1507886	3834615	indurated	IND		
1507886	652510	1507886	3834616	extremely gravelly loamy coarse sand	GRX-LCOS		
1507887	652511	1507887	1385958	gravelly sandy loam	GR-SL	GR-SL	0.4
1507887	652511	1507887	1385959	gravelly coarse sandy loam	GR-COSL		
1507887	652511	1507887	1385960	indurated	IND		
1507887	652511	1507887	1385961	extremely gravelly loamy coarse sand	GRX-LCOS		
1507888	652512	1507888	3834893	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
1507888	652512	1507888	3834894	very gravelly sandy loam	GRV-SL		

### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507888	652512	1507888	3834895	weathered bedrock	WB		
1507888	652512	1507888	3834896	unweathered bedrock	UWB		
1507889	652514	1507889	3834897	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
1507889	652514	1507889	3834898	very gravelly sandy loam	GRV-SL		
1507889	652514	1507889	3834899	weathered bedrock	WB		
1507889	652514	1507889	3834900	unweathered bedrock	UWB		
1507890	652516	1507890	3834901	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
1507890	652516	1507890	3834902	very gravelly sandy loam	GRV-SL		
1507890	652516	1507890	3834903	weathered bedrock	WB		
1507890	652516	1507890	3834904	unweathered bedrock	UWB		
1507890	652517	1507890	1385974	extremely gravelly sandy loam	GRX-SL	GR-SC	0.02
1507890	652517	1507890	1385975	gravelly sandy clay	GR-SC		
1507890	652517	1507890	1385976	sandy clay	SC		
1507890	652517	1507890	1385977	weathered bedrock	WB		
1507890	652517	1507890	1385978	unweathered bedrock	UWB		
1507891	652519	1507891	1385979	very cobbly loam	CBV-L	GRV-CL	0.04
1507891	652519	1507891	1385980	very gravelly clay loam	GRV-CL		
1507891	652519	1507891	1385981	indurated	IND		
1507891	652519	1507891	1385982	unweathered bedrock	UWB		
1507893	652522	1507893	1385992	extremely gravelly silt loam	GRX-SIL	GRV-L	0.25
1507893	652522	1507893	1385993	very gravelly loam	GRV-L		
1507893	652522	1507893	1385994	very gravelly sandy clay loam	GRV-SCL		
1507893	652522	1507893	1385995	very gravelly sandy loam	GRV-SL		
1507893	652523	1507893	1385996	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
1507893	652523	1507893	1385997	very gravelly sandy loam	GRV-SL		
1507893	652523	1507893	1385998	very gravelly loamy sand	GRV-LS		
1507894	652524	1507894	1385999	very stony loam	STV-L	STV-L	0.25
1507894	652524	1507894	1386000	very gravelly loam	GRV-L		
1507894	652524	1507894	1386001	indurated	IND		
1507895	652525	1507895	1386003	very stony loam	STV-L	STV-L	0.25
1507895	652525	1507895	1386004	very gravelly loam	GRV-L		
1507895	652525	1507895	1386005	indurated	IND		
1507895	652525	1507895	1386006	unweathered bedrock	UWB		
1507896	652526	1507896	3835256	very stony loam	STV-L	STV-L	0.25
1507896	652526	1507896	3835257	very gravelly loam	GRV-L		
1507896	652526	1507896	3835258	indurated	IND		
1507896	652526	1507896	3835259	unweathered bedrock	UWB		
1507897	652527	1507897	3835334	very gravelly sandy loam	GRV-SL	GRV-SCL	0.06
1507897	652527	1507897	3835335	very gravelly sandy clay loam	GRV-SCL		
1507897	652527	1507897	3835336	clay	C		
1507897	652527	1507897	3835337	clay loam	CL		
1507897	652528	1507897	1386015	gravelly sandy loam	GR-SL	GR-SCL	0.04
1507897	652528	1507897	1386016	gravelly sandy clay loam	GR-SCL		
1507897	652528	1507897	1386017	gravelly sandy loam	GR-SL		
1507898	652529	1507898	3835338	very gravelly sandy loam	GRV-SL	GRV-SCL	0.06
1507898	652529	1507898	3835339	very gravelly sandy clay loam	GRV-SCL		
1507898	652529	1507898	3835340	clay	C		
1507898	652529	1507898	3835341	clay loam	CL		
1507898	652530	1507898	1386022	gravelly sandy loam	GR-SL	GR-SCL	0.04
1507898	652530	1507898	1386023	gravelly sandy clay loam	GR-SCL		
1507898	652530	1507898	1386024	gravelly sandy loam	GR-SL		

### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507899	652531	1507899	3835342	very gravelly sandy loam	GRV-SL	GRV-SCL	0.06
1507899	652531	1507899	3835343	very gravelly sandy clay loam	GRV-SCL		
1507899	652531	1507899	3835344	clay	C		
1507899	652531	1507899	3835345	clay loam	CL		
1507899	652532	1507899	1386029	gravelly sandy loam	GR-SL	GR-SCL	0.04
1507899	652532	1507899	4346221	gravelly sandy clay loam	GR-SCL		
1507899	652532	1507899	1386030	gravelly sandy clay loam	GR-SCL		
1507899	652532	1507899	1386031	gravelly sandy loam	GR-SL		
1507899	652532	1507899	4346223	gravelly loamy sand	GR-LS		
1507899	652532	1507899	4346222	gravelly loamy sand	GR-LS		
1507899	652532	1507899	1386032	gravelly loamy sand	GR-LS		
1507900	652533	1507900	3835346	very gravelly sandy loam	GRV-SL	GRV-SCL	0.06
1507900	652533	1507900	3835347	very gravelly sandy clay loam	GRV-SCL		
1507900	652533	1507900	3835348	clay	C		
1507900	652533	1507900	3835349	clay loam	CL		
1507900	652534	1507900	1386037	gravelly sandy loam	GR-SL	GR-SCL	0.04
1507900	652534	1507900	3840147	gravelly sandy clay loam	GR-SCL		
1507900	652534	1507900	3840148	gravelly sandy loam	GR-SL		
1507900	652534	1507900	3840149	gravelly loamy sand	GR-LS		
1507901	652535	1507901	1386041	gravelly sandy loam	GR-SL	SL	0.4
1507901	652535	1507901	4704939	sandy loam	SL		
1507901	652535	1507901	1386042	sandy loam	SL		
1507901	652535	1507901	1386043	gravelly sandy loam	GR-SL		
1507901	652536	1507901	1386044	loamy sand	LS	LS	1.2
1507901	652536	1507901	1386045	loamy sand	LS		
1507901	652536	1507901	1386046	gravelly coarse sandy loam	GR-COSL		
1507901	652536	1507901	1386047	coarse sandy loam	COSL		
1507902	652537	1507902	1386048	gravelly loam	GR-L	GR-L	0.25
1507902	652537	1507902	1386049	gravelly sandy loam	GR-SL		
1507902	652537	1507902	4704940	sandy loam	SL		
1507902	652537	1507902	1386050	sandy loam	SL		
1507902	652537	1507902	1386051	gravelly sand	GR-S		
1507902	652538	1507902	1386052	very gravelly loamy sand	GRV-LS	LS	1.2
1507902	652538	1507902	1386053	loamy sand	LS		
1507902	652538	1507902	1386054	sandy loam	SL		
1507903	652539	1507903	1386055	very cobbly loam	CBV-L	CBV-L	0.25
1507903	652539	1507903	1386056	extremely gravelly loam	GRX-L		
1507903	652539	1507903	1386057	unweathered bedrock	UWB		
1507904	652542	1507904	1386058	extremely cobbly loam	CBX-L	CBX-L	0.25
1507904	652542	1507904	1386059	extremely gravelly loam	GRX-L		
1507904	652542	1507904	1386060	unweathered bedrock	UWB		
1507904	652544	1507904	1386061	very stony clay loam	STV-CL	STV-CL	0.04
1507904	652544	1507904	1386062	cobbly clay loam	CB-CL		
1507904	652544	1507904	1386063	silty clay	SIC		
1507904	652544	1507904	1386064	very gravelly clay loam	GRV-CL		
1507905	652545	1507905	1386065	very bouldery loam	BYV-L	BYV-L	0.25
1507905	652545	1507905	1386066	very gravelly loam	GRV-L		
1507905	652545	1507905	1386067	weathered bedrock	WB		
1507907	652548	1507907	1386072	fine sandy loam	FSL	GR-SCL	0.04
1507907	652548	1507907	4370278	gravelly sandy clay loam	GR-SCL		
1507907	652548	1507907	1386073	gravelly sandy clay loam	GR-SCL		



### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507907	652548	1507907	1386074	very gravelly coarse sandy loam	GRV-COSL		
1507908	652549	1507908	1386075	silty clay	SIC	SR- SIC C	0.01
1507908	652549	1507908	1386076	stratified silty clay to clay	SR- SIC C		
1507908	652549	1507908	1386077	stratified very fine sandy loam to silt loam	SR- VFSL SIL		
1507909	652550	1507909	1386078	very fine sandy loam	VFSL	SR- SIL	0.15
1507909	652550	1507909	1386079	stratified silt loam	SR- SIL		
1507909	652550	1507909	1386080	stratified very fine sandy loam	SR- VFSL		
1507909	652550	1507909	1386081	stratified fine sand to loamy fine sand	SR- FS LFS		
1507909	652550	1507909	1386082	stratified fine sandy loam to silty clay loam	SR- FSL SICL		
1507909	652551	1507909	1386083	silty clay loam	SICL	SICL	0.04
1507909	652551	1507909	1386084	silty clay loam	SICL		
1507909	652551	1507909	1386085	silt loam	SIL		
1507909	652551	1507909	1386086	coarse sand	COS		
1507910	652552	1507910	3838328	very fine sandy loam	VFSL	SR- SIL	0.15
1507910	652552	1507910	3838329	stratified silt loam	SR- SIL		
1507910	652552	1507910	3838330	stratified very fine sandy loam	SR- VFSL		
1507910	652552	1507910	3838331	stratified fine sand to loamy fine sand	SR- FS LFS		
1507910	652552	1507910	3838332	stratified fine sandy loam to silty clay loam	SR- FSL SICL		
1507910	652553	1507910	3838413	silty clay loam	SICL	SICL	0.04
1507910	652553	1507910	4344221	silty clay loam	SICL		
1507910	652553	1507910	3838414	silty clay loam	SICL		
1507910	652553	1507910	3838415	silt loam	SIL		
1507910	652553	1507910	3838416	coarse sand	COS		
1507911	652554	1507911	1386096	extremely gravelly sandy loam	GRX-SL	GRX-SL	0.4
1507911	652554	1507911	1386097	very gravelly sandy loam	GRV-SL		
1507911	652554	1507911	1386098	unweathered bedrock	UWB		
1507913	652558	1507913	3838694	gravelly sandy loam	GR-SL	GR-L	0.25
1507913	652558	1507913	3838695	gravelly loam	GR-L		
1507913	652558	1507913	3838696	cemented	CEM		
1507913	652558	1507913	3838697	extremely gravelly loamy coarse sand	GRX-LCOS		
1507914	652559	1507914	3838698	gravelly sandy loam	GR-SL	GR-L	0.25
1507914	652559	1507914	3838699	gravelly loam	GR-L		
1507914	652559	1507914	3838700	cemented	CEM		
1507914	652559	1507914	3838701	extremely gravelly loamy coarse sand	GRX-LCOS		
1507916	652561	1507916	3838706	gravelly sandy loam	GR-SL	GR-L	0.25
1507916	652561	1507916	3838707	gravelly loam	GR-L		
1507916	652561	1507916	3838708	cemented	CEM		
1507916	652561	1507916	3838709	extremely gravelly loamy coarse sand	GRX-LCOS		
1507919	652566	1507919	1386133	very gravelly loam	GRV-L	GRV-L	0.25
1507919	652566	1507919	3838786	very gravelly sandy loam	GRV-SL		
1507919	652566	1507919	3838787	extremely gravelly sandy loam	GRX-SL		
1507919	652566	1507919	3838788	extremely gravelly coarse sandy loam	GRX-COSL		
1507919	652566	1507919	3838789	extremely gravelly loamy sand	GRX-LS		
1507920	652567	1507920	3838782	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
1507920	652567	1507920	1386139	very gravelly sandy loam	GRV-SL		
1507920	652567	1507920	1386140	extremely gravelly sandy loam	GRX-SL		
1507920	652567	1507920	1386141	extremely gravelly coarse sandy loam	GRX-COSL		
1507920	652567	1507920	1386142	extremely gravelly loamy sand	GRX-LS		
1507922	652571	1507922	1386152	silty clay	SIC	C	0.01
1507922	652571	1507922	1386153	clay	C		
1507922	652571	1507922	1386154	silty clay	SIC		



### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507922	652571	1507922	1386155	very fine sandy loam	VFSL		
1507922	652571	1507922	1386156	fine sand	FS		
1507923	652572	1507923	1386157	very gravelly loam	GRV-L	GRV-L	0.25
1507923	652572	1507923	4541325	very gravelly sandy loam	GRV-SL		
1507923	652572	1507923	1386158	very gravelly sandy loam	GRV-SL		
1507923	652572	1507923	1386159	extremely gravelly sandy loam	GRX-SL		
1507923	652572	1507923	1386160	very gravelly loamy sand	GRV-LS		
1507925	652574	1507925	1386165	very gravelly sandy loam	GRV-SL	GRV-SL	0.4
1507925	652574	1507925	1386166	extremely gravelly sandy loam	GRX-SL		
1507925	652574	1507925	1386167	unweathered bedrock	UWB		
1507926	652576	1507926	1386168	extremely stony loam	STX-L	STX-L	0.25
1507926	652576	1507926	1386169	extremely cobbly loam	CBX-L		
1507926	652576	1507926	1386170	unweathered bedrock	UWB		
1507927	652579	1507927	1386171	silt loam	SIL	SIL	0.15
1507927	652579	1507927	1386172	silt loam	SIL		
1507927	652579	1507927	1386173	clay	C		
1507927	652579	1507927	1386174	sand	S		
1507930	652583	1507930	1386189	gravelly sandy loam	GR-SL	SL	0.4
1507930	652583	1507930	4707376	sandy loam	SL		
1507930	652583	1507930	4707377	sandy loam	SL		
1507930	652583	1507930	4707378	sandy loam	SL		
1507930	652583	1507930	4707379	gravelly sandy loam	GR-SL		
1507930	652583	1507930	4707380	very gravelly sandy loam	GRV-SL		
1507930	652583	1507930	4707381	very gravelly sandy loam	GRV-SL		
1507930	652584	1507930	1386193	gravelly clay loam	GR-CL	GR-CL	0.04
1507930	652584	1507930	1386194	sandy loam	SL		
1507930	652584	1507930	1386195	sandy clay loam	SCL		
1507930	652584	1507930	1386196	gravelly coarse sandy loam	GR-COSL		
1507931	652585	1507931	1386197	silty clay	SIC	SIC	0.02
1507931	652585	1507931	1386198	stratified silty clay	SR- SIC		
1507931	652585	1507931	1386199	stratified fine sand	SR- FS		
1507932	652586	1507932	3839332	gravelly loamy sand	GR-LS	GR-LS	1.2
1507932	652586	1507932	3839333	gravelly loamy coarse sand	GR-LCOS		
1507932	652586	1507932	3839334	very gravelly coarse sand	GRV-COS		
1507932	652587	1507932	1386203	coarse sandy loam	COSL	COSL	0.4
1507932	652587	1507932	1386204	loamy coarse sand	LCOS		
1507932	652587	1507932	1386205	gravelly loamy coarse sand	GR-LCOS		
1507932	652587	1507932	1386206	loamy coarse sand	LCOS		
1507932	652587	1507932	1386207	very gravelly loamy coarse sand	GRV-LCOS		
1507933	652589	1507933	3839335	gravelly loamy sand	GR-LS	GR-LS	1.2
1507933	652589	1507933	3839336	gravelly loamy coarse sand	GR-LCOS		
1507933	652589	1507933	3839337	very gravelly coarse sand	GRV-COS		
1507933	652590	1507933	3840759	coarse sandy loam	COSL	COSL	0.4
1507933	652590	1507933	3840760	loamy coarse sand	LCOS		
1507933	652590	1507933	3840761	gravelly loamy coarse sand	GR-LCOS		
1507933	652590	1507933	3840762	loamy coarse sand	LCOS		
1507933	652590	1507933	3840763	very gravelly loamy coarse sand	GRV-LCOS		
1507934	652592	1507934	1386216	sand	S	LS	1.2
1507934	652592	1507934	1386217	loamy sand	LS		
1507935	652593	1507935	1386218	coarse sand	COS	LS	1.2
1507935	652593	1507935	1386219	loamy sand	LS		

### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507935	652594	1507935	1386220	fine sandy loam	FSL	GR-SIL	0.15
1507935	652594	1507935	1386221	gravelly silt loam	GR-SIL		
1507935	652594	1507935	1386222	gravelly loamy fine sand	GR-LFS		
1507937	652597	1507937	1386227	very gravelly loam	GRV-L	GRV-L	0.25
1507937	652597	1507937	3839504	very gravelly sandy loam	GRV-SL		
1507937	652597	1507937	3839505	weathered bedrock	WB		
1507937	652597	1507937	3839506	unweathered bedrock	UWB		
1507938	652599	1507938	1386231	very stony loam	STV-L	STV-L	0.25
1507938	652599	1507938	1386232	very cobbly loam	CBV-L		
1507938	652599	1507938	1386233	unweathered bedrock	UWB		
1507940	652602	1507940	3839655	sandy loam	SL	SL	0.4
1507940	652602	1507940	3839656	fine sandy loam	FSL		
1507940	652602	1507940	3839657	sandy loam	SL		
1507940	652602	1507940	3839658	loam	L		
1507940	652602	1507940	3839659	very gravelly sandy loam	GRV-SL		
1507941	652603	1507941	3839660	sandy loam	SL	SL	0.4
1507941	652603	1507941	3839661	fine sandy loam	FSL		
1507941	652603	1507941	3839662	sandy loam	SL		
1507941	652603	1507941	3839663	loam	L		
1507941	652603	1507941	3839664	very gravelly sandy loam	GRV-SL		
1507941	652604	1507941	1386249	gravelly sandy loam	GR-SL	SL	0.4
1507941	652604	1507941	4707403	sandy loam	SL		
1507941	652604	1507941	4707404	sandy loam	SL		
1507941	652604	1507941	4707405	sandy loam	SL		
1507941	652604	1507941	4707406	gravelly sandy loam	GR-SL		
1507941	652604	1507941	4707407	very gravelly sandy loam	GRV-SL		
1507941	652604	1507941	4707408	very gravelly sandy loam	GRV-SL		
1507943	652606	1507943	1386253	very fine sandy loam	VFSL	VFSL	0.4
1507943	652606	1507943	1386254	very fine sandy loam	VFSL		
1507943	652606	1507943	1386255	clay	C		
1507944	652607	1507944	1386256	gravelly loamy sand	GR-LS	CL	0.04
1507944	652607	1507944	1386257	clay loam	CL		
1507944	652607	1507944	1386258	clay	C		
1507944	652607	1507944	1386259	cobbly clay loam	CB-CL		
1507944	652608	1507944	1386260	gravelly sandy loam	GR-SL	SL	0.4
1507944	652608	1507944	4707409	sandy loam	SL		
1507944	652608	1507944	4707410	sandy loam	SL		
1507944	652608	1507944	4707411	sandy loam	SL		
1507944	652608	1507944	4707412	gravelly sandy loam	GR-SL		
1507944	652608	1507944	4707413	very gravelly sandy loam	GRV-SL		
1507944	652608	1507944	4707414	very gravelly sandy loam	GRV-SL		
1507945	652609	1507945	4352633	very cobbly loam	CBV-L	CL	0.04
1507945	652609	1507945	3839721	clay loam	CL		
1507945	652609	1507945	3839722	clay	C		
1507945	652609	1507945	3839723	cobbly clay loam	CB-CL		
1507945	652610	1507945	1386268	gravelly sandy loam	GR-SL	SL	0.4
1507945	652610	1507945	3840041	sandy loam	SL		
1507945	652610	1507945	3840042	sandy clay loam	SCL		
1507945	652610	1507945	3840043	gravelly coarse sandy loam	GR-COSL		
1507946	652611	1507946	3839738	very gravelly sandy loam	GRV-SL	CL	0.04
1507946	652611	1507946	3839739	clay loam	CL		

### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507946	652611	1507946	3839740	clay	C		
1507946	652611	1507946	3839741	cobbly clay loam	CB-CL		
1507946	652612	1507946	1386276	gravelly sandy loam	GR-SL	SL	0.4
1507946	652612	1507946	3840050	sandy loam	SL		
1507946	652612	1507946	3840051	sandy clay loam	SCL		
1507946	652612	1507946	3840052	gravelly coarse sandy loam	GR-COSL		
1507948	652616	1507948	1386293	sandy loam	SL	SL	0.4
1507948	652616	1507948	1386294	coarse sandy loam	COSL		
1507948	652616	1507948	1386295	gravelly loamy sand	GR-LS		
1507948	652616	1507948	1386296	gravelly sand	GR-S		
1507948	652616	1507948	1386297	gravelly sandy clay loam	GR-SCL		
1507949	652617	1507949	3839981	sandy loam	SL	SL	0.4
1507949	652617	1507949	3839982	coarse sandy loam	COSL		
1507949	652617	1507949	3839983	gravelly loamy sand	GR-LS		
1507949	652617	1507949	3839984	gravelly sand	GR-S		
1507949	652617	1507949	3839985	gravelly sandy clay loam	GR-SCL		
1507950	652618	1507950	1386303	very cobbly loam	CBV-L	GR-CL	0.04
1507950	652618	1507950	1386304	gravelly clay loam	GR-CL		
1507950	652618	1507950	1386305	gravelly clay	GR-C		
1507950	652618	1507950	1386306	gravelly clay loam	GR-CL		
1507950	652618	1507950	1386307	gravelly sandy loam	GR-SL		
1507950	652618	1507950	1386308	very gravelly loamy sand	GRV-LS		
1507950	652619	1507950	1386309	very cobbly loam	CBV-L	SC	0.02
1507950	652619	1507950	3838642	sandy clay	SC		
1507950	652619	1507950	3838643	weathered bedrock	WB		
1507950	652619	1507950	3838644	unweathered bedrock	UWB		
1507951	652620	1507951	1386313	very gravelly loam	GRV-L	GRV-L	0.25
1507951	652620	1507951	3840065	sandy loam	SL		
1507951	652620	1507951	3840066	sandy clay loam	SCL		
1507951	652620	1507951	3840067	gravelly coarse sandy loam	GR-COSL		
1507952	652621	1507952	1386317	very gravelly loam	GRV-L	GRV-L	0.25
1507952	652621	1507952	3840074	sandy loam	SL		
1507952	652621	1507952	3840075	sandy clay loam	SCL		
1507952	652621	1507952	3840076	gravelly coarse sandy loam	GR-COSL		
1507953	652622	1507953	1386321	extremely gravelly sandy loam	GRX-SL	GRX-SL	0.4
1507953	652622	1507953	1386322	very gravelly sandy loam	GRV-SL		
1507953	652622	1507953	1386323	weathered bedrock	WB		
1507953	652622	1507953	1386324	unweathered bedrock	UWB		
1507955	652625	1507955	1386328	extremely cobbly loam	CBX-L	CBX-L	0.25
1507955	652625	1507955	3840110	extremely gravelly loam	GRX-L		
1507955	652625	1507955	3840111	unweathered bedrock	UWB		
1507957	652629	1507957	4039068	extremely cobbly loam	CBX-L	CBX-L	0.25
1507957	652629	1507957	3840119	extremely gravelly loam	GRX-L		
1507957	652629	1507957	3840120	unweathered bedrock	UWB		
1507958	652631	1507958	1386337	extremely cobbly loam	CBX-L	CBX-L	0.25
1507958	652631	1507958	3840123	extremely gravelly loam	GRX-L		
1507958	652631	1507958	3840124	unweathered bedrock	UWB		
1507959	652634	1507959	1386340	extremely cobbly loam	CBX-L	CBX-L	0.25
1507959	652634	1507959	3840130	extremely gravelly loam	GRX-L		
1507959	652634	1507959	3840131	unweathered bedrock	UWB		
1507960	652637	1507960	1386343	gravelly loamy sand	GR-LS	GR-SCL	0.04

### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507960	652637	1507960	3840156	gravelly sandy clay loam	GR-SCL		
1507960	652637	1507960	3840157	gravelly sandy loam	GR-SL		
1507960	652637	1507960	3840158	gravelly loamy sand	GR-LS		
1507961	652638	1507961	1386347	gravelly sandy loam	GR-SL	GR-SCL	0.04
1507961	652638	1507961	3840165	gravelly sandy clay loam	GR-SCL		
1507961	652638	1507961	3840166	gravelly sandy loam	GR-SL		
1507961	652638	1507961	3840167	gravelly loamy sand	GR-LS		
1507961	652639	1507961	1386351	gravelly clay loam	GR-CL	GR-SCL	0.04
1507961	652639	1507961	1386352	gravelly sandy clay loam	GR-SCL		
1507961	652639	1507961	1386353	gravelly sandy loam	GR-SL		
1507962	652640	1507962	1386354	silt loam	SIL	SIL	0.15
1507962	652640	1507962	1386355	silt loam	SIL		
1507962	652640	1507962	1386356	fine sand	FS		
1507963	652641	1507963	3840343	very cobbly sandy loam	CBV-SL	CBV-SL	0.15
1507963	652641	1507963	3840344	very gravelly sandy loam	GRV-SL		
1507963	652641	1507963	3840345	very gravelly loamy sand	GRV-LS		
1507964	652642	1507964	3840198	very cobbly sandy loam	CBV-SL	CBV-SL	0.15
1507964	652642	1507964	3840199	very gravelly sandy loam	GRV-SL		
1507964	652642	1507964	3840200	very gravelly sand	GRV-S		
1507966	652646	1507966	3838954	extremely stony loam	STX-L	STX-L	0.25
1507966	652646	1507966	3838955	extremely cobbly loam	CBX-L		
1507966	652646	1507966	3838956	unweathered bedrock	UWB		
1507968	652650	1507968	1386370	extremely gravelly fine sandy loam	GRX-FSL	GRX-FSL	0.4
1507968	652650	1507968	1386371	very gravelly sandy loam	GRV-SL		
1507968	652650	1507968	1386372	weathered bedrock	WB		
1507968	652650	1507968	1386373	unweathered bedrock	UWB		
1507971	652657	1507971	1386389	fine sand	FS	LS	1.2
1507971	652657	1507971	1386390	loamy sand	LS		
1507971	652658	1507971	1386391	gravelly fine sand	GR-FS	FS	4.6
1507971	652658	1507971	1386392	fine sand	FS		
1507971	652658	1507971	1386393	fine sand	FS		
1507972	652660	1507972	1386395	sand	S	S	4.6
1507972	652660	1507972	1386396	sand	S		
1507972	652661	1507972	1386397	fine sand	FS		
1507972	652661	1507972	1386398	fine sand	FS		
1507972	652661	1507972	1386399	fine sand	FS		
1507973	652663	1507973	1386401	very gravelly loam	GRV-L	GRV-L	0.25
1507973	652663	1507973	1386402	gravelly loam	GR-L		
1507973	652663	1507973	1386403	very gravelly sandy loam	GRV-SL		
1507974	652664	1507974	1386404	very gravelly loam	GRV-L		
1507974	652664	1507974	3840396	gravelly loam	GR-L	GR-L	0.25
1507974	652664	1507974	3840397	very gravelly sandy loam	GRV-SL		
1507975	652665	1507975	1386407	very gravelly sandy loam	GRV-SL		
1507975	652665	1507975	3840400	gravelly loam	GR-L		
1507975	652665	1507975	3840401	very gravelly sandy loam	GRV-SL		
1507976	652666	1507976	1386410	very gravelly sandy loam	GRV-SL	GR-L	0.25
1507976	652666	1507976	3840404	gravelly loam	GR-L		
1507976	652666	1507976	3840405	very gravelly sandy loam	GRV-SL		
1507977	652667	1507977	1386413	very gravelly loamy sand	GRV-LS	GR-L	0.25
1507977	652667	1507977	3840408	gravelly loam	GR-L		
1507977	652667	1507977	3840409	very gravelly sandy loam	GRV-SL		



### Golden Valley Ranch Technical Drainage Study

cokey		chkey		Soil Texture		Confining layer	XKSAT
1507977	652668	1507977	1386416	very gravelly sandy loam	GRV-SL	CBX-SCL	0.06
1507977	652668	1507977	1386417	extremely cobbly sandy clay loam	CBX-SCL		
1507977	652668	1507977	1386418	very gravelly sandy loam	GRV-SL		
1507977	652668	1507977	1386419	very gravelly sandy clay loam	GRV-SCL		
1507977	652669	1507977	1386420	very gravelly sandy loam	GRV-SL	GRV-SC	0.02
1507977	652669	1507977	1386421	very gravelly sandy clay	GRV-SC		
1507977	652669	1507977	1386422	very gravelly sandy clay loam	GRV-SCL		
1507977	652669	1507977	1386423	very gravelly sandy loam	GRV-SL		
1507978	652670	1507978	1386424	very gravelly loamy sand	GRV-LS	GR-L	0.25
1507978	652670	1507978	3840412	gravelly loam	GR-L		
1507978	652670	1507978	3840413	very gravelly sandy loam	GRV-SL		
1507978	652671	1507978	3840566	very gravelly sandy loam	GRV-SL	CBX-SCL	0.06
1507978	652671	1507978	3840567	extremely cobbly sandy clay loam	CBX-SCL		
1507978	652671	1507978	3840568	very gravelly sandy loam	GRV-SL		
1507978	652671	1507978	3840569	very gravelly sandy clay loam	GRV-SCL		
1507978	652672	1507978	3838065	very gravelly sandy loam	GRV-SL	GRV-SC	0.02
1507978	652672	1507978	3838066	very gravelly sandy clay	GRV-SC		
1507978	652672	1507978	3838067	very gravelly sandy clay loam	GRV-SCL		
1507978	652672	1507978	3838068	very gravelly sandy loam	GRV-SL		
1507980	652674	1507980	1386439	extremely gravelly sandy loam	GRX-SL	GRX-SL	0.4
1507980	652674	1507980	3840468	very gravelly sandy loam	GRV-SL		
1507980	652674	1507980	3840469	weathered bedrock	WB		
1507980	652674	1507980	3840470	unweathered bedrock	UWB		
1507981	652676	1507981	1386443	extremely cobbly loam	CBX-L	CBX-L	0.25
1507981	652676	1507981	1386444	very gravelly loam	GRV-L		
1507981	652676	1507981	1386445	very gravelly loam	GRV-L		
1507981	652677	1507981	3841455	very gravelly loamy sand	GRV-LS	GRV-SCL	0.06
1507981	652677	1507981	3841456	very gravelly sandy clay loam	GRV-SCL		
1507981	652677	1507981	3841457	very gravelly sandy loam	GRV-SL		
1507981	652677	1507981	3841458	gravelly loamy sand	GR-LS		
1507981	652677	1507981	3841459	gravelly loam	GR-L		
1507981	652678	1507981	1386448	very cobbly sandy loam	CBV-SL	CBV-SCL	0.06
1507981	652678	1507981	1386449	very cobbly sandy clay loam	CBV-SCL		
1507981	652678	1507981	1386450	very cobbly clay	CBV-C		
1507981	652678	1507981	1386451	extremely cobbly sandy clay	CBX-SC		
1507985	652682	1507985	3840677	very cobbly loam	CBV-L	CBV-L	0.25
1507985	652682	1507985	3840678	extremely gravelly fine sandy loam	GRX-FSL		
1507985	652682	1507985	3840679	indurated	IND		
1507985	652682	1507985	3840680	unweathered bedrock	UWB		
1507986	652683	1507986	1386462	extremely stony sandy loam	STX-SL	STX-SL	0.4
1507986	652683	1507986	1386463	very gravelly sandy loam	GRV-SL		
1507986	652683	1507986	1386464	very gravelly coarse sandy loam	GRV-COSL		
1507986	652683	1507986	1386465	indurated	IND		
1507987	652684	1507987	1386466	very stony loam	STV-L	STV-L	0.25
1507987	652684	1507987	3840703	very gravelly sandy loam	GRV-SL		
1507987	652684	1507987	3840704	very gravelly coarse sandy loam	GRV-COSL		
1507987	652684	1507987	3840705	indurated	IND		
1507989	652686	1507989	3840717	gravelly loamy sand	GR-LS	GR-SL	0.4
1507989	652686	1507989	3840718	gravelly sandy loam	GR-SL		
1507989	652686	1507989	3840719	gravelly sandy clay	GR-SC		
1507989	652686	1507989	3840720	gravelly sandy clay loam	GR-SCL		